NORWEGIAN DOOR AND WINDOWCONTROL

NDVK Rules

NDVK

NORSK DØR- OG VINDUSKONTROLL

SERTIFISERT

"RULES FOR CERTIFICATION AND INSPECTION VISITS".

Updated: March 2018

These rules were revised in March 2018 and adopted by the AGM of Norwegian Door and Window Control on 17 April 2018.

The rules replace in their entirety the
“NDVK Rules for Certification and Inspection Visits” of May 2012.

Points whose contents have been amended partly or wholly are marked by a vertical line in the left margin.

Please also note that numbering of headings may have changed from the previous edition of the rules.

Content:

1. Procedure for NDVK Certification

NDVK Certification may cover the following activities:

- Application for NDVK Certification
- Processing of application (assessment)
- Initial visit (introductory visit)
- Type testing
- Issuance of NDVK Certificate
- Inspection visits (ongoing control)

Request for NDVK Certification

The following materials will be sent to companies that contact NDVK to enquire about information regarding NDVK Certification:

- NDVK Rules for Certification and Inspection Visits
- Invitation to briefing visit
- Application form
- NDVK Rules
- Other relevant material

Application for NDVK Certification

A company that has decided to become NDVK Certified submits an application to NDVK
The following documents should be enclosed with the form: an approved report on type testing, a complete set of data sheets for all standard products (Annex 5) and product drawings for all of the company's products, plus a copy of the company's quality management system.
The application form must be signed by the company director or the NDVK manager. NDVK registers the application and sends the company a written acknowledgement of receipt, normally within one week, together with an overall timetable for further stages of the certification process.

Processing of application (assessment)

NDVK appoints a professional employee who has an understanding of the product type and production concerned, to assess the materials that are submitted by the applicant company.
The company will receive a report within the time scale given in the timetable, either confirming that the description of the products and quality management system meets NDVK's certification basis, or advising what points cannot be agreed upon.
In the event of major disagreements, the company will be required to submit new documentation, including a report on type testing, before the assessment can continue.
Documentation showing the correction of minor discrepancies may be presented at the initial visit.

Certification visits

The aim of the initial visit is to clarify

- Whether there is accordance between the company's actual products and production, the NDVK Rules and previously approved data sheets, drawings, etc.
- Whether the quality system is adapted to the company's actual conditions and processes used, and that it is implemented and works effectively.
- Whether the company has an operational HSE/Internal Control system.

During the verification of the system's implementation particular emphasis will be placed on the company's registration of customer complaints/claims, and the subsequent remedial measures that have to be taken.
The initial visit will be carried out by an NDVK inspector who has assessed the application and the materials submitted.

Throughout the visit, which normally takes one day, the company will be represented by an employee with the necessary understanding and competence to accept, on site, the deviations indicated.
On completion of the visit, an oral account is given of the recorded deviations and remarks, which is followed by a written report within two weeks of the visit.
The report contains references to the points where any remedial actions are to be implemented before NDVK Certification can be given.
The cost for this is invoiced and must be paid by the company concerned.

Issuance of NDVK Certificate

When it has been verified, following the initial visit and any remedial actions, that the company's products and quality management comply with the NDVK Rules, an NDVK Certificate is issued.
This will contain the following:

- The company's name
- The address(es) covered by the company's field of operations and hence the NDVK Certificate
- The products that are certified
- Reference to the NDVK Rules

The certification document is sent to the company by post

The names of the companies that hold an NDVK Certificate, and the products for which the company holds a brand right, are registered on an ongoing basis on NDVK's website at the address http://www.ndvk.no/

The company must mark its products, mention its NDVK Certificate and use the NDVK logo as described in the NDVK Rules: "Requirements for windows and exterior doors..." Part 6.

Extension or limitation of Certified Products

A company that wishes to extend or limit the number of products must request this in writing. The request must be signed by the company's NDVK manager or the general manager, and be accompanied by a description of the changes.

Inspection

1.1.1 Frequency of visits

It is a condition for maintaining the NDVK Certification that it can be verified at an inspection, to be carried out once a year, that the company's products and quality management comply with the overall requirements for the NDVK Certification.

The time of the ordinary annual inspection is chosen by the NDVK's secretariat. The inspections can be undertaken without prior notification to the company, but normally a notice period of at least one week is given.
The visits can be carried out on any working day, i.e. Monday - Friday, except during public holidays.

The time of the inspection is in principle chosen at random for each company, but must be arranged in such a way that travel costs are kept at a reasonable level.

1.1.2 The basis for and scope of the production and system control

NDVK's assessment of the product quality and the efficiency of the quality management system is undertaken on the basis of spot checks and a review of the production.

In order to achieve an effective assurance of the level of quality, the annual inspection will be an ongoing control of the construction principles used, the *construction quality, the production quality* and the *efficiency of the quality management system*. In addition, the company's process flow overview forms the basis for an assessment of any areas of risk in the process, where errors can easily arise and where preventative measures may be necessary (ISO9001-2015).

The inspections are carried out as described, see Annexes 6 and 7.

In addition, there will be a verification that remedial measures for any observations/deviations from previous inspection visits are undertaken.

Thus the assessment of the quality is based on representative *spot checks in the production*, and the absolute quality affirmation is replaced with a *probability*. The quality affirmation is categorised and assessed in the same way as the user can be expected to do in his assessment. Two categories are used, namely *significant deviations* and *remarks*.

The quality management system is controlled by means of spot checks in accordance with the present quality manual and NDVK Rules. Checks are made as to whether the system still works effectively, and what the company has undertaken since the last visit.
The annual "Management Review" shall describe these areas as a minimum: Template for report on the management review. Annex 11.

The manufacturer has the opportunity to use recognised Lean Principles in its quality management system, provided that the intentions and regulations in the "Certification and Inspection Visit" rules are met. The following must be described in addition:

- Full process flow overview showing control points and including checklists for the entire process (from customer enquiry to completed delivery). See example in Annex 12.
- If board meetings or similar working methods are used, the following guidelines should be described as a minimum:
  - Where, when and which participants
  - What is to be discussed at the meeting - fixed agenda
  - Recording of deviations - Determination of remedial measures - Monitoring and Archiving
  - Which Lean Methods/tools are used during improvement activities (PDCA, 5xHvorfor, Root cause analysis, A3, etc.)
  - Implementation and monitoring of determined improvement measures - Assessment of results
  - Other conditions it is appropriate to discuss at the meeting.
- Registrations and archiving can be carried out visually (images, video, etc.).
- Annual "Risks and Opportunities Assessment" for the entire course of the process, see process flow overview.

1.1.3 Consideration of collected results

Upon completion of the inspection visit, the company's NDVK manager is informed orally of the results of the overall assessment.

The results of an individual inspection visit are processed by the inspector to form a report, including a deviations form if necessary, which is sent to the company and the NDVK secretariat within 14 days.

1.1.4 Description of categories of remarks and deviations

Categories of deviations/errors	Description of categories of deviations/errors	
	Production control	**System control**
No remark	Satisfies the requirements	Satisfies the requirements
Remark (A)	The situation is of no essential significance for the product's qualities and does not deviate from the type approval.	The company's documentation has omissions and/or described procedures are only partially implemented in the company.
Significant deviation (B)	The situation will be of essential significance for the product's qualities and use, or the product deviates from the type approval, plus major deviations in implementation	The company's documentation has omissions (is incomplete), and/or described procedures are not implemented in the company.

Areas that are not inspected during the visit are left without an assessment code (blank).
Remarks/deviations and categorisation are described in “Basis for the assessment of the product quality” (Annex 6) and “Basis for the assessment of the quality system” (Annex 7).

1.1.5 Approval criteria

Categories of deviations/remarks	How measured?	Number of deviations and remarks allowed during inspection	
		Production control	System control
Significant deviations	Deviations/remarks per inspection visit	0	0
Remarks		≥ 5=deviation	≥ 5=deviation

If remarks/deviations are observed during an ordinary inspection visit, this must be recorded in “Inspection and deviations report during inspection visits” (Annex 4).

The company will be given a deadline of up to one month to carry out the remedial actions, and to inform the NDVK inspector in writing when the remedial actions have been implemented.

If the company is unable to document implemented remedial actions and/or (the) deviations are not closed by NDVK by the deadline, then an escalated control will be carried out.
If 5 remarks are recorded (= 1 significant deviation) or 1 significant deviation within the same control points two years running, escalated control will be carried out automatically.

If the company does not respond to the reminder within the time stated, the inspector will inform the NDVK secretariat in writing. This will be done at the latest 1 week after the deadline has expired. If the company does not respond to this either, point 1.1.6 will be implemented.

1.1.6 Escalated control

With escalated control, 2 inspection visits are carried out per year. When escalated control is implemented, this continues until it is determined in 2 consecutive inspection visits that the deviations are closed and the error level is below the fixed upper limits for significant errors and remarks.

If deviations that have triggered escalated control still remain after the third visit, measures will be taken immediately, in accordance with Section 6.1 of the NDVK’s Articles of Association.

The procedure for both ordinary and escalated control is shown in a diagram in point 2.9 Schematic illustration of the control procedure.

Control and testing - External control

Control points/areas are specified in the product approval for products **with** a brand right, and in the certification agreement for the part of the production that covers products **without** a brand right.
The certification body may decide, following a proposal from an external inspector/auditor, to increase the scope of self-regulation, if this is considered necessary. The manufacturer will be advised of the reasons for such increase.
The inspection port for air and water-tightness testing must allow for each of the standard products to be control tested during the course of a period of 2 - two - years.
The definition of standard products is understood to be doors and windows that are different in technical solutions, profile structures, fittings systems, etc.
Where products are modified, an assessment of the need for new type testing must be undertaken by the inspector in cooperation with NDVK
(E.g.: Slide-hinged versus side-hinged window or external door/patio door with espagnolette versus only 1 centrally positioned main lock)
In the event of deviations from NDVK’s rules, the number of test ports and the frequency of inspection visits are determined in accordance with the external inspector’s/auditor’s assessment and acceptance from NDVK as the certification body.

2. Certification Rules

Requirements for the quality system

100% of the window/French window and external door production shall be covered by the certification.
Brand rights shall be owned for at least half the number of types of standard products that the company produces for the Norwegian market. In addition:
At least 80% of the company's total turnover on the Norwegian market must be products with a brand right, measured by number and based on statistics from the previous year. The statistics must be presented to the inspector during the annual inspection visit. See form under Annex 14.
The manufacturer has the opportunity to use recognised Lean Principles in its quality management system, provided that the intentions and regulations in the "Certification and Inspection Visit" rules are met. See also Pt 1.1.2, Sections 2, 6 and 7.

2.1.1 Responsibilities of the Management

2.1.1.1 Quality targets and quality policy:

Written, management-approved quality policy and quality targets, showing the following:
- a description of the activity (area of activity, customers, competition funding)
- the company management's general approach to quality and the company's defined quality levels
- specific targets for quality, funds for target achievement and target criteria

The quality policy must be documented and familiarised by everyone, at all levels of the organisation.

2.1.1.2 Descriptions of responsibilities, authorities and positions

Descriptions of responsibilities, authorities and positions that refer to products and quality systems, and the persons who deputise where necessary, must be included in the organisational plan or responsibility matrix, and a written description of responsibilities and positions should be drawn up for the company's NDVK manager.

2.1.2 Quality System

2.1.2.1 Structure of the quality system

The structure of the quality system will cover the following areas at least:
- assessment of supplier
- production
- planning
- maintenance
- product development
- training
- development and maintenance of the system

The determined quality system should describe:
- how the system is built, its structure and levels
- linkage between documents
- process flow with control points, checklists and procedures

In the event of major modifications (e.g. changes in production methods/equipment or in the certification of new products), written quality plans are to be prepared, describing the following at least:
- approval of the planning documents
- plans and time scales for testing
- training of the operators concerned

Significant modifications (glass, glass seals, weather strips, etc.) that were made to the product(s) last year should be presented to the inspector during the annual inspection visit.

2.1.2.2 Documents and forms

Documents and forms that are to be "maintained" must be given a clear, identifiable number and name.

2.1.2.3 Description of the system

The quality manual which contains a general description the selected main functions of the quality system (incl. procedure, quality control points, with associated work descriptions and quality control document). Description of process and/or works per production line/workstation containing the quality control points

2.1.3 Management of the planning

2.1.3.1 Requirements for planning and product description

Approved, valid assembly drawings must be provided for all products included in the production, and tolerances must be stated on the drawings.

2.1.3.2 Modification of the products

When modifications to a product with a brand right is planned, the modifications must be approved by NDVK before production is started. Drawings with accompanying descriptions of the modifications must be sent to the NDVK secretariat.
Modifications that do not affect the product's functioning can be made without NDVK's approval (e.g. profiling of surfaces which is done for cosmetic reasons).
Updated drawings and data sheets for the product must always be in place and able to be provided if required. Section drawings must be enclosed with all test reports. Type designations given in the test reports must always be in accordance with the manufacturer's own designations.

2.1.4 Document management

2.1.4.1 The quality manual's associated documents:

A description of the procedure that ensures that the documents, forms and drawings that are used in the quality system are the latest available and updated versions.

2.1.5 Purchase

2.1.5.1 Supplier evaluation and supplier overview:

The requirements for the most important products that are purchased and the need for subcontractors should be described, as well as the verification model and procedure for approval:

- Of purchased products, at least these should be described: wooden materials, fibre plates, adhesives, insulation glazing, putty, sealants, surface treatment agents, fittings, aluminium and PVC profiles.
- Assurance that the acceptance control has also been made aware of the requirements stipulated for purchased products and subcontractors
- An account of the criteria for the choice of suppliers, including the method of evaluating a new supplier

Overview of the approved suppliers:

- The company's internal overview of suppliers of wooden materials, fibre plates, adhesives, insulation glazing, putty, sealants, surface treatment agents, fittings, aluminium and PVC profiles, as well as transport, assembly and maintenance services.
- Principles for how the suppliers are included in the overview and how they are struck off the overview
- Monitoring of the suppliers' ability to produce the right quality (min. registration and processing of deviations)

2.1.6 Product identification and traceability

2.1.6.1 Product marking:

Describes how the products can be identified and traced back to the manufacturer (physical marking of each individual product)
The requirement is that each individual product or product series can be tracked from customer to manufacturer via an invoice/order confirmation or serial number.

Note: The manufacturer must give the necessary information to ensure the traceability of his product, for example, by means of product identification that links a product to the manufacturer and production. *This information must be placed on the product or given in the accompanying papers.*
All products must have CE marking with specific characteristics. The characteristics should be documented in their own "Declaration of Performance", which should be made available to the customer (online or accompanying the product), cf. "NDVK Requirements for windows and exterior doors" Chap. 6.1.

2.1.7 Process management

2.1.7.1 Descriptions of works

Critical quality requirements that are specified for the products and the tolerance levels are given in writing.

- for the production process's quality control points (minimum requirements in Fig. 4.10 Inspection and testing)

Everyone associated with the production must familiarise themselves with the quality requirements, which must also be made available to each operator. If lean methodology is applied, SPL (Single Point Lessons) descriptors are used.
The product must be accompanied by written instructions for the customer/building site as regards receipt, handling, storage and assembly.

2.1.8 Inspection and testing

2.1.8.1 Acceptance control

A description of the procedure for the acceptance control of all main components or the subcontractors' documents for confirmed quality (see 4.6 Purchase, criteria for the most important products).
A description of the acceptance control frequency and responsibilities in respect of inspection, approval and procedure in the case of deviations:

- Acceptance control is carried out when any wooden materials are received (for quality and wood moisture content)
- The control interval for other components is set according to risk of error
- Requirements for registrations in connection with the quality control
- Delivery notes or despatch notes can be used as documents

These are not required to be stored in the case of normal observations of the delivery, deviations should be recorded at all times.
Cf. Process flow overview with specified control points and checklists.

2.1.8.2 Control during manufacture

The quality control points that are necessary in the production process must be defined/described
An internal quality control must be carried out for:

- quality and moisture content of wooden materials
- profiling/joining
- waterproofing and/or surface treatment
- assembling/adhesion/mounting
- Weather strips
- Open/close function
- glazing/putty/caulking
- Dimension control during works: Minimum after each manual adjustment and/or tool replacement

Control frequency set at minimum once per series and for each adjustment of automatic machinery minimum once per replacement/product
The operator must be familiar with the procedure in the event of deviations.
Cf. Process flow overview with specified control points and checklists is compulsory.

2.1.8.3 Final inspection

A description of the procedure for final inspection, where these are defined as a minimum:

- frequency of inspection of what is to be inspected
- criteria for approval
- responsibilities
- the inspection frequency should be at least once per product/replacement

The inspection should include at least

- correspondence of order to delivery
- visual inspection of surface treatment
- glass
- function

Control points and approval criteria should be familiarised by the inspector.
The requirement for making registrations in connection with the quality control applies to:
All final inspections, including deviations and any corrections that have to be made before approval.
The person carrying out the final inspection must be aware of the measures that must be implemented in the case of deviations.
The final inspection may be omitted or changed if lean methodology is used, see process flow overview with stated control points and checklists, cf. Pt. 1.1.2. Sec. 7 and Pt. 2.1.2.1. Sec. 1.

2.1.9 Deviations management

2.1.9.1 The methods relating to deviations

The operator must be familiar with what a deviation is, the procedure for dealing with deviations, the criteria for approving/disallowing products at all levels of the production. Products with deviations should be prevented from progression, marking and placing/further handling (they must not be mixed with approved products), registration of products with deviations and reporting procedures (line manager or, if necessary, the rest of the work chain)
Deviations must be recorded with details of the date, description of the deviation, cause, handling/correction and inspector/operator
The overview of deviations should be processed (see 4.14 Corrective and preventative measures)
May be changed and adapted if lean methodology is used, see Pt. 1.1.2 Sec. 7 and “Management review”.

2.1.10 Corrective and preventative measures

2.1.10.1 Procedure for correcting deviations:

- the procedure that is used to prevent errors/deviations from repeating themselves, the method used for collecting information on deviations, the procedure for and frequency of monitoring of action plans to prevent errors/deviations from repeating themselves
- areas of responsibility for internal deviations must be handled and brought to the attention of the management.

Action plans should be prepared often enough to prevent a repetition of the error/deviation, but at least once a year
The action plan should contain, as a minimum, planned actions, information for employees on changes to the working methods, timetable, “who does what”, areas of responsibility and approval of the plan and, if necessary, methods for monitoring and measuring.
May be changed and adapted if lean methodology is used, see Pt. 1.1.2 Sec. 7 and “Management review”.

2.1.11 Handling, storage, packing, keeping and delivery

After a compliance control has been carried out, the products should be protected to ensure the quality is not impaired.
The transportation company and building site should pay attention to suitable loading, unloading and transportation methods, and also the storage of the products on the building site (training or written instructions, as required).
The manufacturer’s instructions/description regarding receipt, handling, storage and assembly during the building process must be supplied to the customer together with the goods, along with advice on what special considerations should be given to the product in this respect, and what consequences an error here may have on the product’s shelf life and the customer’s rights to complain.

2.1.12 Registrations

2.1.12.1 Overview, collection, specification, archiving and deletion of collected registrations/data

All relevant documentation must be kept for at least the period of the product’s warranty, or for the time scales stipulated in the applicable accounting or company law.
Identification of quality data must be limited to
Date
Product type
Serial number or order number
Registration should also contain information on
The name of the person registering
Results
Procedure in the event of deviations
All documents, drawings etc. must be numbered

2.1.13 Documentation of U-value

2.1.13.1 Definition

A product’s U-value is the size of the heat transmission through the product, calculated in accordance with the product’s stated size and design. The U-value expresses how many Watts pass through the product at a temperature difference of 1K.
For windows the U-value is shown as U_W and for doors as U_D. The U-value is mentioned in the unit W/m2K.

2.1.13.2 The manufacturer's responsibilities

The manufacturer is responsible for documenting a product's U-value himself. U_W and U_D should be given for the whole product construction (glass, filling and casing/frame).
Manufacturers can declare the product's U_W in brochure material or other information material according to a reference size of 1,200x1,200 mm or 1,230x1,480 mm, and U_D according to a reference size of 900/1,000x2,100 mm or 1,230 x 2,180 mm, which is in accordance with the product standard for windows and doors NS-EN 14351-1.
For each delivery the manufacturer must state the average U-value for the entire delivery. Details of the U_W and/or U_D must always be given for an individual product in the current size and design.
In accordance with NS-EN ISO 10077 Part 1, the U_W and U_D must be given with two applicable digits.
In practice, this means, for example, 1.2 W/m²K and 0.85 W/m²K.

2.1.13.3 Declaration of the U_W and U_D

The U_W and/or the U_D should be given for the whole product construction (glass, filling and casing/frame), in accordance with:
NS-EN ISO 10077-1 Supplement F, and where the middle U-value route (Ug) is specified in accordance with NS-EN 673 or calculations described in the current edition of NS-EN ISO 10077 Part 1 or 2, and where the middle U-value route (Ug) is specified in accordance with NS-EN 673 or calculations described in the current edition of ISO 15099 or measured in a laboratory in accordance with NS-EN ISO 12567-1 or NS-EN ISO 12567-2.

In calculating the U_W and/or U_D in accordance with NS-EN ISO 10077 Part 1 and 2, the thermal conductivity (heat conductivity) for the individual materials should be retrieved from NS-EN 10077 Part 2 or NS-EN ISO 10456. Thermal conductivity is shown as an λ-value and mentioned in the unit W/mK.

For calculations according to the simplified method, carried out on products in the reference size, the manufacturer must prepare a calculation report in accordance with NS-EN ISO 10077 Part 1, and for calculations according to the numerical method, a calculation report must be prepared in accordance with NS-EN ISO 10077 Part 2.

Upon inspection, it must be possible to present documented calculations for each product that has a brand right. The calculations may be required to be verified by an approved third party. For new products the calculations must be verified by a third party at all times. *) Tenders/customer orders must specify a U-value of each product and the entire consignment as a whole. It is permitted to excluded uncertified products (e.g. basement/garage windows and doors) from the overall calculation.

Deliberate or wilful incorrect use of U-values will automatically lead to escalated control, cf. Point 1.1.6. Repeated violations will lead to loss of the right to use the mark.

Annex 8 is used during inspection for an examination of the U-value documentation.

*) NB!
Please note that if the U values are to be used for CE marking, this requires compliance with EN 14351-1 and, thus, also with the Construction Products Regulation. If the documentation is not prepared by a "designated regulatory body", it will not be possible to use this as a basis for CE marking.

2.1.14 Documentation of internal control/HSE

The manufacturer must be able to document that he has an operational internal control, where the necessary HSE requirements and procedures for monitoring are observed. This is to be verified during the annual inspection.

2.1.15 Order and Cleanliness

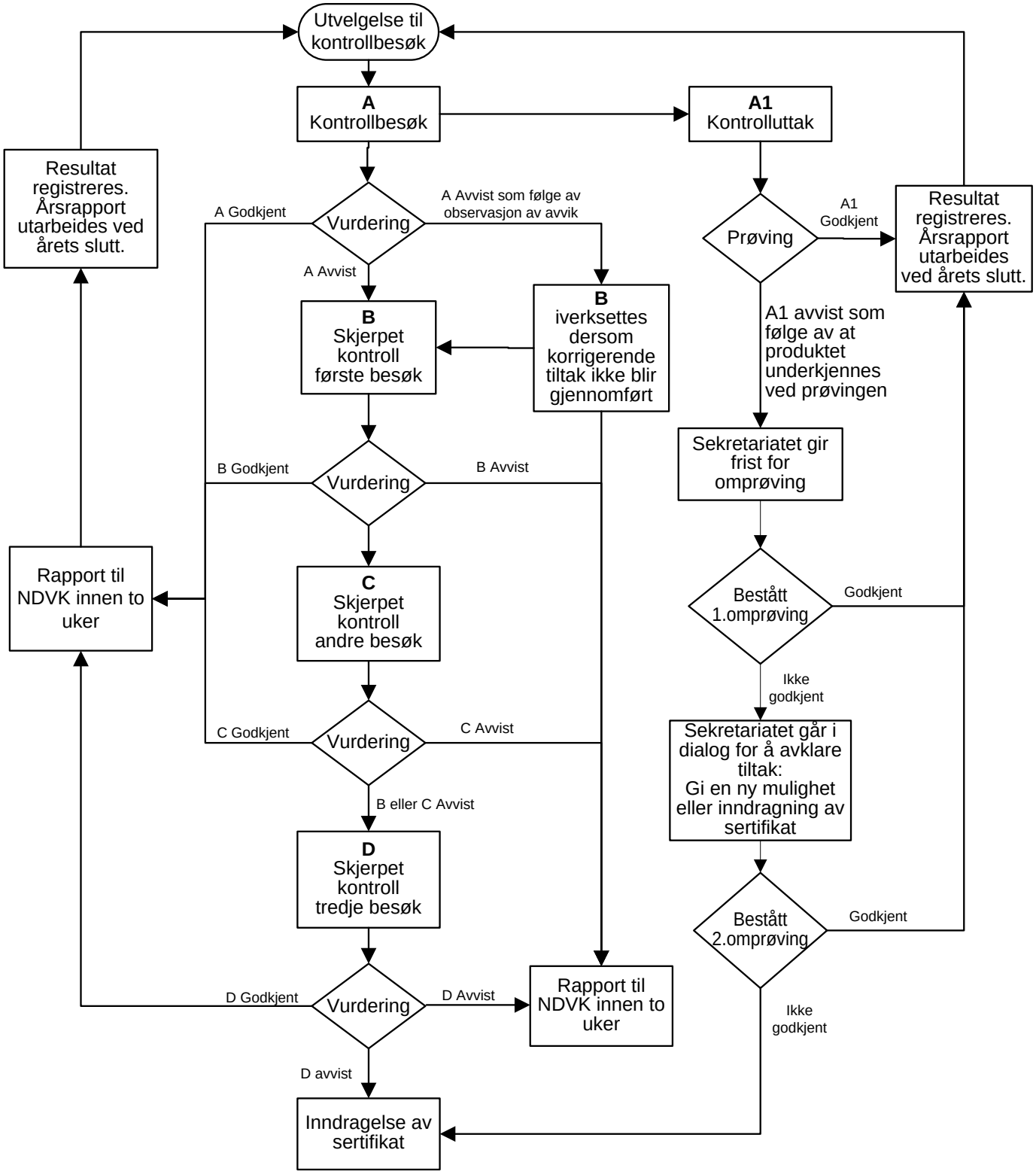
The manufacturer must have procedures for maintaining order and cleanliness, and definitions of requirements for an acceptable level for his storage and production premises.

2.1.16 Requirement for Solvency

The manufacturer must be able to document a solvency factor of >1, in order to demonstrate that there are sufficient grounds for meeting the warranty obligations towards his customers. Ref. previous year's accounts. Own template to be used. See Annex 13.

3. Annexes

Annex 1 Schematic illustration of the control procedure



Annex 2 Minimum requirements for product drawings

Type drawing	Product type				
	Window	French window	Framed exterior door	Pressed exterior door	2-leaf products without mulli-on
Horizontal section of right and left side with clearance - casing/frame	X	X	X	X	X
Vertical section of top and bottom with clearance - casing/frame	X	X	X	X	X
Horizontal section with clearance - frame/mullion	X	-	X	X	-
Vertical section with clearance - frame/transom	X	X	X	X	X
Horizontal section of slats in frames	X	X	X	-	X
Vertical section of slats in frames	X	X	X	-	X
Horizontal section of balus-trades/fillings	-	X	X	-	X (-)
Vertical section of balustrades/fillings	-	X	X	-	X (-)
Horizontal section with clearance - both leaves (elements)	-	-	-	-	X

NB !! All drawings must be tolerance-set

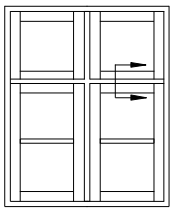
This can be done in the following two ways:

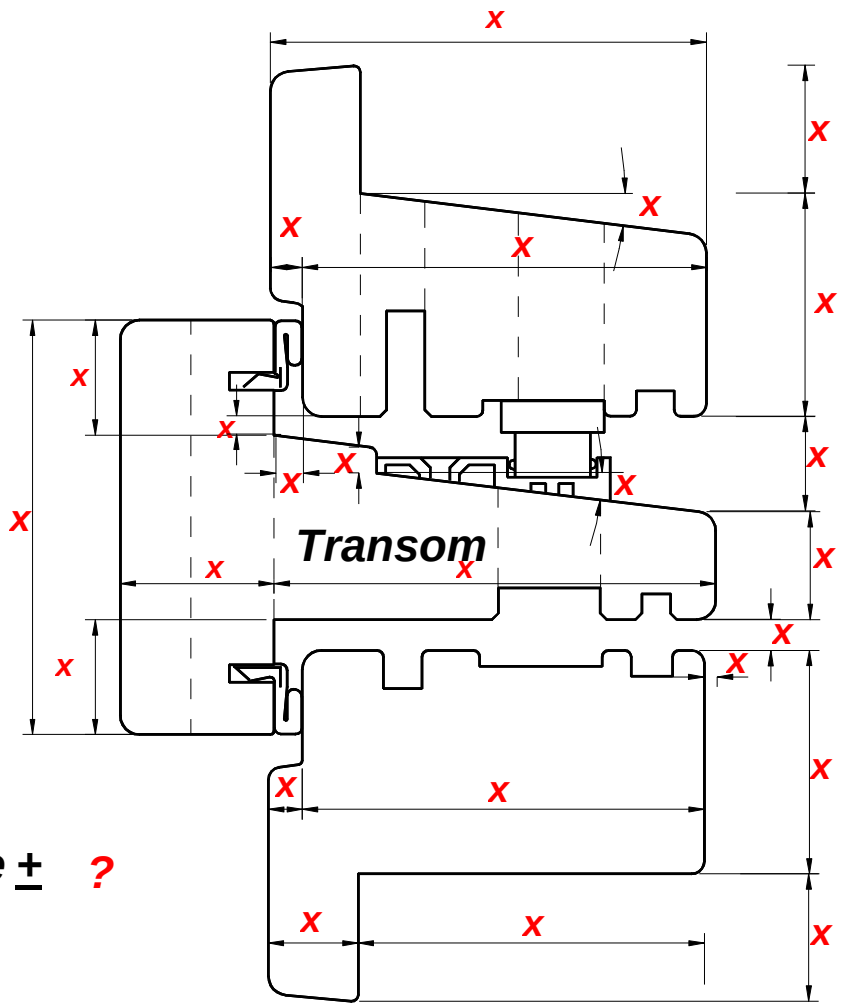
1. A general tolerance is indicated on each drawing, and if there are deviations from this, a link to the target concerned is shown (marked) on the drawing.
2. A specific tolerance is specified for each target (on all drawings)

Examples of approved drawings are shown on the following pages.

All parts of the product must be shown in vertical and horizontal section drawings.
This applies to all of the company's standard products (standard profile systems).

Annex 2.1 Example of Vertical transom with clearance - casing/frame

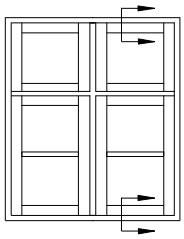


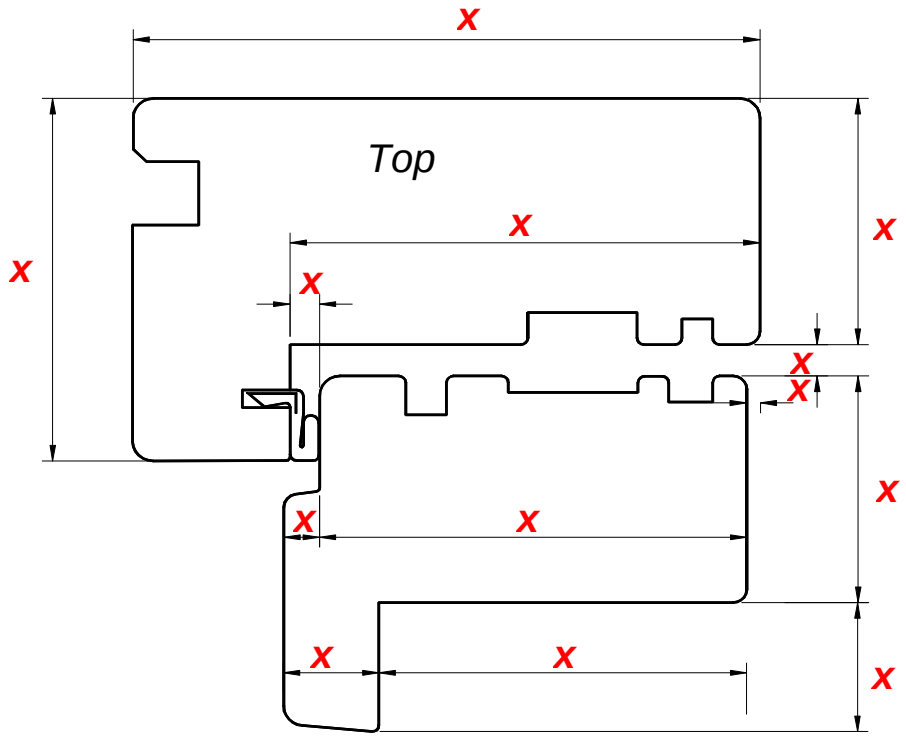


Tolerance ± ?

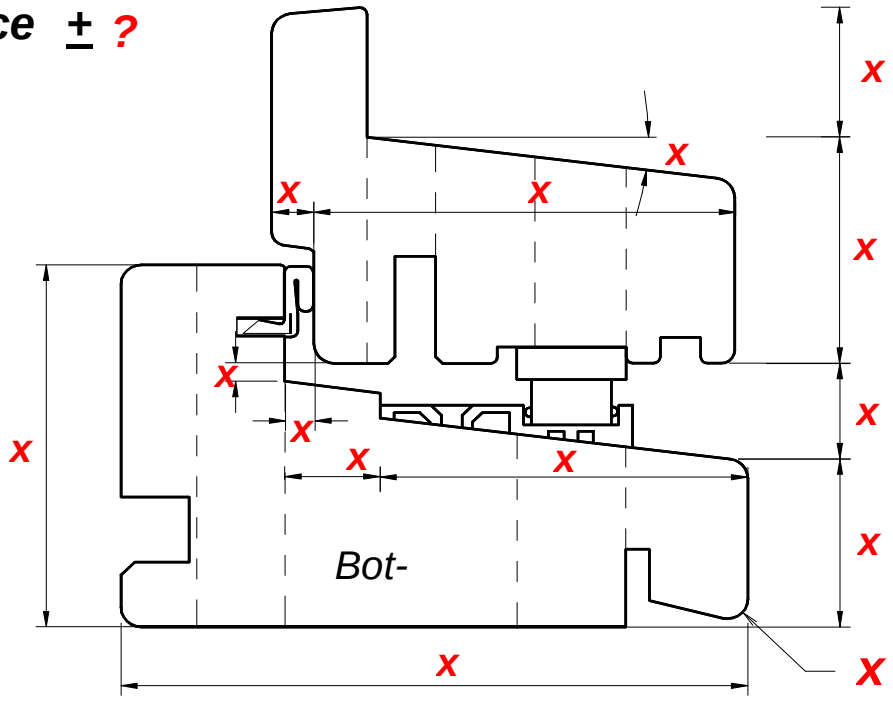
Date:		*Parts included in the NDVK-certified product*	*Product*	*Vertical sec-tion*
Corr:			Draw.	*X*
Designed by:		***Name of NDVK compa-***		
Approved by:			Target:	*1 : 1*

Annex 2.2 Example of Vertical of top/bottom with clearance - casing/frame





Tolerance ± ?



Date:		***Target setting of NDVK-certified product***	***Product***	***Vertical section***
Corr:			Draw.	***X***
Designed		**Name of NDVK company**		
Approved by:			Tar-	*1 : 1*

Annex 3 Requirements for accuracy of measuring equipment

General

The accuracy of the equipment that is used for the control of targets/specifications, and which may affect the product's characteristics, must fall within the following tolerances.
The company must be able to document this.

Tape measure:

- 1 m band, Deviation ± 0.5 mm
- 2 m band, Deviation ± 0.7 mm
- 3 m band, Deviation ± 0.9 mm
- 5 m band, Deviation ± 1.3 mm

Calipers:

- 0-150 mm, Deviation ± 0.1 mm

90° angle:

- At a length of 500 mm, Deviation ± 0.5 mm

Protractor:

- Deviation ± 1/4°

Wood moisture content meter

- 7-17 weight %, deviation up to ± 1 weight %

NB !!

This document only contains requirements for tolerances on the actual measuring tool, and not requirements for what equipment companies must have.

Equipment for use in self-regulation in the member companies must be defined by each company itself according to its own needs.

Annex 4 Control and Deviations Report during inspection visits

Company:	**Material type:**	**Inspector:**

Annex 4.1 Production control

Wood moisture content, weight %																											
Raw materials storage										**Production**										**Finished goods storage**							
7	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**

Pt.	**Area - quality assessment:**	**Assessment** [1)]			**Comments**
	Assessment of product quality	**OK**	**A**	**B**	
1	Wood moisture content				
2	Wood quality				
3	Wood surface (e.g. plane quality)				
4	Quality of workmanship (e.g. occurrence of chipping)				
5	Casing profile - dimensional tolerances				
6	Frame profile - dimensional tolerances				
7	Casing/frame clearances				
8	Corner connections				
9	Priming (waterproofing)				
10	Surface treatment				
11	Adhesion and joining				
12	Weather strips				
13	Fittings and assembly of fittings				
14	Glass and glazing				
15	Components (e.g. sealant)				
16	Type approval (modifications)				
17	U-value calculations				
18	CE marking of products and associated declaration of performance				
19	Order and Cleanliness				

Amendment: Pt. 11. Supplement: Pt. 18, Pt. 19

[1)]: **Basis for assessment** The inspector's assessments are marked with an (x) in the assessment fields

Blank field: For inspection not completed, with additional comments
OK: No remark
A: Remark
B: Significant deviation (Control/Deviation report is reviewed at concluding meeting)

Appendix 4.2 System control

Pt.	Area - quality assessment:	Assessment [1)]			Comments
	Assessment of quality system	OK	A	B	
1	Written quality manual (or similar)				
Are there any written procedures describing procedures for the following:					
2	Document and data management				
3	Deviations management, corrective and preventative measures				
4	Acceptance of goods and acceptance control				
5	Management review				
6	Assessment and approval of supplier				
7	Calibration				
8	Final inspection				
9	Production				
10	Development and modification of product				
11	Training				
12	Handling, storage and packing				
13	How to identify and track the product				
14	Product drawings - Product data sheet				
15	Internal control/HSE				
Are there any written work descriptions that cover the following:					
16	Mortise, tenon and profiling				SPLs can be used for all work descriptions.
17	Milling and drilling for fittings, etc.				
18	Surface treatment				
19	Pressing of casing/frame				
21	Assembly of fittings, sealants, etc.				
22	Hanging of frame in casing				
23	Glazing				
24	Packing and despatch				

Supplement: Pt. 15

[1)]: Basis for assessment: The inspector's assessments are marked with an (x) in the assessment fields

Blank field: For inspection not completed, with additional comments
OK: No remark
A: Remark
B: Significant deviation (Control/Deviation report is reviewed at concluding meeting)

Place	Date	Signature of inspector	Company's NDVK manager

Annex 5 Product data sheet for all standard products

General	
Manufacturer	
Product name	
Product type	
Drawings No. (to be enclosed)	

Adhesive	
Mortise joints (manufacture and type of adhesive)	
Flat adhesion	

Joint sealing					
Type of weather strip (manufacture and type)					
Fixing method					
Clip					
	Top	**Left side/Closing side**	**Right side/Hinge side**	**Bottom**	**Sash**
Casing/frame clearance					

Fittings	Qty.	Positioning	Type designation	Surface	Manufacturer
Handles/closers					
Hinges					
Espagnolette/Locks					
Slide track					
Closing points (quantity)					
Type of bolt					
Child/cleaning protection					

Glass	
Glass manufacturer	
Glass seal internal	
Glass seal external	
Sealant	

Complete product	
U-value window	
U-value door	

Wood protection	Method	Liquid/Product
Priming		
Primer		
Surface treatment		
Door leaf/casing		
Veneer/door leaf design		
Insulation		
Cassette		
Threshold		

Place: Date: Signature:

Annex 6 Basis for assessment of product quality
Assessment criteria (error categories): See Pt. 1.1.4

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. in NDVK-Requirements V&YD
			A	B		
1	**Wood moisture content**					
	Moisture content greater than 15% and less than 9%, regarded as a significant error			X	12 % ± 3 % (95% of target results must fall within permitted deviation of 3%)	3.1.5 Table 3.1
2	**Wood quality**					
	Width of growth ring > 4 mm	If the mean value is >5 mm, the error will be evaluated as a significant deviation.	X		Mean value ≤ *4.0* mm, calculated at the widest part of a cross-section across the rings. The permitted deviation from the requirement in the centre-most lamina of laminated structures is ≤ *5.0* mm.	3.1.5 Table 3.1.5
	Fibre inclination ≥ 1:10	On long frames (door), mullions and similar, the fibre inclination should be less than		X	Maximum 1:10	3.1.5 Table 3.1.5
	For large knots			X	See NDVK Rules Table 3.4a and 3.4b	3.1.5 Table 3.4a Table 3.4b
	For multiple knots		X			
	Dead knots (fixed) of no significance for the function and/or appearance				Permitted	
	Decayed knot			X	Not permitted	
	Loose knot, knot hole	Knot hole can be plugged or otherwise remedied		X	Not permitted	
	Cracks or overgrowth			X	Not permitted	3.1.5 Table 3.2
	Insect damage or rot			X	Not permitted	
	Waterline or bark			X	Not normally permitted, but may be allowed on the casing's wall side	
	Use of wrong material for plugging		X		Wood plugging only	3.1.6
	Plugging in glazing bead/slat			X	Not permitted	
	Plugging (different types)	Plugging in an exterior bottom piece and 30 cm up vertical parts will be assessed as a significant deviation.	X		Up to 30 mm in diameter is permitted, except externally in bottom pieces and 30 cm up vertical parts. Plugging in plugging is not allowed. Counted and measured as a knot.	3.1.6
	Cracks on visible parts		X		Only microcracks allowed	3.1.5 Table 3.3
	Large cracks on the casing's wall side			X	Not deeper than half the thickness of the profile. Acceptable along the entire length of the casing but not continuously.	
	Crack above edges		X		Only microcracks allowed	
	Cracks on hidden parts		X		200 mm/< 2 mm width 300 mm/< 1.5 mm width	
	Cracks in bottom piece (bottom rebate)			X	Not permitted	
	Pockets of resin	Must not weaken the construction or cause leaks	X		Can be accepted in glass rebates and on the wall side.	3.1.5 Table 3.2

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. in NDVK-Requirements V&YD
			A	B		
	Blue stain on painted products		X		Can be permitted to a limited extent (e.g. blue sprinkle) in treatment covering the entire surface	
	Blue stain on unprocessed/lacquered products		X		Can be permitted to a limited extent (e.g. blue sprinkle) on non-visible sides	
	Pith - porous		X		Permitted on non-visible surfaces: max. length ≤ 150 mm. Must not extend to or touch exterior corners/tenons	
	Long hook		X		Curvature ≥ 2 mm per m	3.1.5 Table 3.1
	Twist		X		≥ 2mm per 10 cm per m	
3	Wood surface - Plane quality					
	Roughness		X		Minimal only. All surfaces must be smooth (Does not apply to the casing's wall side)	Verification in acc. with Parts 1, 2 and 5
	Fibre erection around knots		X		Minimal only	
	Shavings pressure	The cause is generally deficient cleaning and extraction from planing	X		Must be avoided on visible surfaces	
	Chopping blows		X		Must be avoided on visible surfaces if greater than 2 mm	
	Drag stripes from tools, roller marks			X	Not permitted	
4	**Quality of workmanship - Occurrence of chipping**					
	Occurrence of chipping; internally visible side			X	Occurrence is not permitted	Verification in acc. with Parts 1, 2 and 5
	Occurrence of chipping; non-visible surfaces (closed position)		X		Small occurrences permitted	
5-7	**Dimensional tolerances**					
	Clearance between casing/frame - deviation up to 1 mm in respect of type approval	Tolerance requirement according to drawing	X		Deviation under 1 mm will be acceptable	Verification in acc. with Parts 1, 2 and 5
	Clearance between casing/frame - deviation over 1 mm in respect of type approved	Deviation may lead to leakage		X	This will normally be too large a deviation from the type approval	
	Edge break	Necessary for thickness of surface film, touch and vulnerability.	X		To be implemented, > 2 mm radius recommended. (Phasing is not regarded as edge break.)	
	Deviations in respect of tolerance requirements	If the dimensions of decomposers deviate so much that this has a negative impact on the product's function and/or density, the error will be assessed as a significant deviation.	X		Min. tolerance requirement ±0.2 mm	
8	**Corner connections**					
	Defective adjustment of mortise and tenon profile and counter-profile	Deviation may easily lead to leakage		X	Good friction between mortise and tenon with no splitting. Close fit of profile to counter-profile	Verification in acc. with Parts 1, 2 and 5

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. in NDVK-Requirements V&YD
			A	B		
	Lipping	Deviation may easily lead to leakage		X	Maximum 0.4 mm	
	Deficient sealing of rims, or similar, where water may seep from an opening to an underlying area with glass or filling.			X	Must be plugged	
	Lacking or deficient sealing between bottom and side glass rebate, applies to both casing and frame	The corner of the glass must not be left in contact with the sealing mass		X	Has to protect against water penetration in the corner connection, but must not hinder drainage of water	
	Holes behind water noses, kick plates, and similar			X	To be plugged	
	Screwing/pinning - lack of pins/scres	Omissions reduce the product's function and safety, will be assessed as a significant deviation.	X		Description of manufacturer/supplier of fittings	
	Screwing/pinning - lack of corrosion resistance		X		Corrosion resistance as for fittings	
9, 10	Wood protection					
	Priming not carried out (vacuum, dip, sprinkling)			X	Minimum dip priming or sprinkling	5.10.1
	Not sufficient film thickness paint		X		Requirements lacking	5.10.2
	Surface finish not good enough • A lot of impurities in the paint • Large differences in colour • Damage from handling • Large pressure marks • A lot of fibre erection • A lot of soiling	Depending on the extent, the inspector may assess the error(s) as a significant deviation.	X	(X)	Smooth and clean surface with minimal fibre erection and with even coverage on end grain, edges and in shadow joints, etc. (See NDVK Rules, Pt. 4.11)	
	Wood/Aluminium products - lack of priming			X	Minimum dip priming or sprinkling	5.10.1
	Wood/Aluminium products - deficient ventilation behind cladding			X	Normally a minimum of 5 mm clearance between aluminium and wood	5.9
	Wood/Aluminium products - lack of sealing in the upper edge			X	Joint covered over between casing and wall to prevent water from penetrating behind the aluminium cladding	5.9
11	Adhesion and joining					
	Use of non-approved adhesive	Must have documentation		X	D4 adhesive or better	
	Not enough adhesive used or applied incorrectly - corner connection/plugging	For the adhesive to have sufficient strength and sealing qualities, there must be good friction between the adhesive surfaces.		X	The adhesive is applied to all surfaces and to the ends of the tenon shoulders, and the parts are brought together by pushing the adhesive towards the tenon shoulders. In order to satisfy requirements for watertightness, the adhesive must fill the entire gap between the glued parts.	5.5

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. in NDVK-Requirements V&YD
			A	B		
	Not enough adhesive used or applied incorrectly - open time, compression, etc. during laminating/joint adhesion			X	Newly planed surface, planing on one side is normally sufficient The adhesive manufacturer's guidelines for adhesive quantity, open time, compression, etc. must be followed.	
12	**Weather strips**					
	Seal clip - too weak or hard	An error that is attributable to leakage or a damaged weather strip will be assessed as a significant deviation.	X	(X)	Requirements for clips as with type test	Parts 1 and 2 5.6
	Lipping and/or damage in sash	If the weatherstrip does not allow for unevenness, the error will be assessed as a significant deviation.	X	(X)	There must not be any lipping or damage that may lead to point leakage	
	Poor watertightness in the corner or defects on the weather strip	Weather strips that suck water must not reach the casing rebate		X	Corner joints must be sealed against point leaks	
	Corner solution	If the strips are butt-jointed, the side strips should go down to the bottom frame and the bottom profile should come in between. Clear point leakage will be assessed as a significant deviation.		X		
13	Fittings and assembly of fittings					
	Serious deficiencies in mounting of hinges and other fittings (wrong quantity/size/screws, etc.)			X	The fittings manufacturer's specifications	5.4 / 5.2.10
	Wrong size of turn fittings (frame turns too high)			X	The fittings manufacturer's instructions	
	Insufficient number of closing points			X	See type approval	
	Incorrect mounting of fittings in relation to the product's edges, or during milling for the fitting - including splintering/chipping	Errors affecting the product's opening and closing function and/or watertightness, will be assessed as a significant deviation.	X	(X)	Careful mounting that ensures the product's opening and closing function and watertightness.	
	Uneven distance between hinge parts Greater than 0.5 mm	Errors affecting the product's opening and closing function, will be assessed as a significant deviation.	X	(X)		
	Lack of support block(s)/bearing blocks where these should be in place	Errors affecting the product's opening and closing function, will be assessed as a significant deviation.	X		The glass manufacturer's instructions must be followed	
	Milling or drilling to the wall side in casing	Some bolts on external door require through screws Extra sealing necessary		X	Must not lead to air and/or water leakage.	

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. in NDVK-Requirements V&YD
			A	B		
	Error in opening/closing function			X	Must be error-free Bolt, handle, espagnolette, adaptation, etc.	
14	Glass and glazing					
	Error in glass (bubbles, split, or similar) or large impurities			X	Not permitted	5.3 / 5.6 5.7 / 5.2.10
	Balustrades and fillings not of moisture-stable materials	If swelling is too great, this may damage the construction and function		X	Must have a durability and stability equivalent to the other materials of the product	
	Draining - large quantities or totally lacking			X	Screw bottom rebate and drained bottom glazing bead as type approval	
	Bottom glazing bead - not protruding and/or too small drip edge	If the distance between the frame and the drop edge is <5 mm, the error will be evaluated as a significant deviation.	X	(X)	As the type approval	
	Corner glazing beads - difference in height and adaptation between the beads		X		Sealed joint with trimming - mitre cutting (on doors) without differences in elevation	
	Side glazing beads - end seal lacking - distance to bottom glazing bead	Does not apply to strips on doors that are to be sealed on top.	X		Side strips must be end-sealed and mounted at a distance from the bottom glazing bead of 5 mm	
	Wrong distance between screws/pins on glazing beads	Distance > 25 cm between pins, will be assessed as a significant deviation. (Must be assessed in relation to the material of the strip)	X	(X)	Is assessed on the basis of the rigidity of the strip and the fixability of the screws/pins. 15-20 cm recommended between each pin/screw.	
	Pinning - lack of corrosion resistance			X	Corrosion resistance as for fittings	
15	Components (e.g. sealant)					
	Change of type of sealant			X	Not permitted without NDVK's acceptance	5.7 + Cert. rules 2.1.2.1
	Inbound components are changed	In relation to type-approved product		X	Not permitted without NDVK's acceptance. Testing can be required in cases of doubt	
16	Type approval (modifications)					
	Modifications have been made to the product that deviate from the type approval			X	Not permitted without NDVK's acceptance	Cert. rules 2.1.2.1 / 2.1.3.2
	Drawings are not updated or target setting is insufficient			X		
17	U-value calculations					
	Calculations lacking for one or more products			X	Must be in place for each of the company's products	Cert. rules 2.1.13
	U-value lacking for each product and/or collectively for the whole delivery	Must be stated in the offer/order		X		
18	CE marking of products and associated declaration of performance					

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. in NDVK-Requirements V&YD
			A	B		
	The products are not CE marked			X	Each product must be marked	6.1 + Cert. rules 2.1.6.1
	Declaration of Performance lacking	Must be available for the customer		X	At least 1 characteristic must be declared and stated on the Declaration of Performance	
19	Order and Cleanliness					
	Necessary procedures and defined requirements lacking	Applies to all production and storage premises, with external areas		X	The manufacturer must have procedures for maintaining order and cleanliness, and definitions of his own requirements for what is an acceptable level	Cert. rules 2.1.15
	Not completed in accordance with the described requirements and procedures		X	(X)	As above	

Supplement:
Pt. 15: Components
Pt. 16: Type approval (modifications)
Pt. 17: U-value calculations
Pt. 18: CE marking of products and associated declaration of performance
Pt. 19: Order and Cleanliness

Appendix 7 Basis for assessment of the quality management system

This form is intended for use in two ways:

1. As a self-declaration for the introduction of a new NDVK system.
   - For this, use error category: "A" for: Prepared and
     "B" for: "Implemented"

2. As the basis for the inspector while visiting/reviewing the company. Assessment criteria A and B: See Pt. 1.1.4

Pt.	What is to be assessed	Error category A	Error category B	Comments	Ref. in NDVK- Cert. & Cont.
1	**Has a quality manual (or similar) been written which describes the following:**				2.1.2
	Brief description of the business?				
	Description of the system's structure?				
	Quality philosophy and measurable quality targets?				
	Organisational chart?				
	Description of responsibilities within the company?				
	Procedure for the management review?				
	Is everyone familiar with the quality targets?				
	Is everyone familiar with the division of responsibilities?				
Are there written procedures for the following:					
2	***Document and data management***				2.1.2
	Management of documents, drawings and data?				
	Identification of documents?				
	Auditing and storage of documents?				
3	***Deviations management, corrective and preventative measures***				2.1.9 2.1.10
	Management of internal and external deviations?				
	Description of: What deviations are?				
	How to find causes, implement actions and monitor?				
	Who is responsible?				
	How the management is made aware of deviations?				
	Notification of internal deviations?				
	Notification of external deviations?				
4	***Acceptance of goods and acceptance control***				2.1.8
	Acceptance of goods and acceptance control, incl. requirements for registrations?				
	Ensuring that non-controlled/approved goods are used?				
	Acceptance control of wood?				
5	***Management review***				2.1.1
	Management review?				
6	***Assessment and approval of supplier***				2.1.5
	Criteria for selection of supplier?				
	List of suppliers?				
	Monitoring of suppliers and quality of purchased goods?				
	Evaluation of new suppliers?				
7	***Calibration***				Annex 3
	Identification of equipment and status?				
	Intervals and requirements for accuracy?				
	Registrations?				
8	***Final inspection***				2.1.8.3
	Procedure for final inspection, incl. frequency, criteria for approval, responsibility and requirements for registrations?				
9	***Production***				2.1.8.2
	Process overview, incl. description of control during manufacture?				

Pt.	What is to be assessed	Error category A	Error category B	Comments	Ref. in NDVK- Cert. & Cont.
	Descriptions of works?				
	Drawings?				
10	***Development and modification of product***				
	Management of new development and modification of product?				
	Procedure for planning and implementation?				2.1.3
	Fulfilment of requirements for drawings and product description, incl. tolerances?				
	Contact with external bodies?				
11	***Training***				
	Training and identification of skills of employees?				
	Induction of new employees?				
12	***Handling, storage and packing***				
	Requirements for handling/storage on the building site?				
	Description of assembly?				2.1.11
	Procedures for handling, storage, packing and delivery				
	FDV documentation?				
13	***How to identify and track the product?***				2.1.6
	Product data sheet				
14	***Product drawings - Product data sheet***				Appendix 2 + 2.1 and 2.2
	Product drawings with tolerances				
	Product data sheet				
15	***Internal control/HSE***				2.1.14
	Operational internal control - description of monitoring?				
	HSE focus and initiatives? Record keeping?				
Are there any written work descriptions that cover the following:				**Single point lessons (SPL) can be used**	2.1.7.1
16	***Mortise, tenon and profiling?***				
	Control procedures for:				
	Critical profile dimensions				
	Length dimensions				
	Fit				
	Quality of material				
	Quality of workmanship				
17	***Milling and drilling for fittings, etc.?***				
	Control procedures for:				
	Milling dimensions				
	Positioning				
	According to order				
18	***Surface treatment?***				
	Control procedures for:				
	Volume of application				
	Finish				
19	***Pressing of casing/frame?***				
	Control procedures for:				
	Application of adhesive				
	Diagonal				
20	***Assembly of fittings, sealants, etc.?***				
	Control procedures for:				
	Positioning of fittings without milling				
	Corners of weather strip				
21	***Hanging of frame in casing?***				

Pt.	What is to be assessed	Error category A	Error category B	Comments	Ref. in NDVK- Cert. & Cont.
	Control procedures for:				
	Clearances				
	Open/close function				
22	***Glazing?***				
	Control procedures for:				
	Blocks				
	Joints				
	Clips on glass seal				
23	***Packing and despatch?***				
	Control procedures for:				
	Packaging				

Pt. 15: Internal control/HSE (new)

Annex 8, Control of U-value calculations

Checklist			OK ?	
			Yes	No
1	Full reporting of documentation for spot test product?			
2	Report from third party	Border/climate conditions		
		Material description/λvalues		
		Route description		
		Compliance of product <-> drawing		
3	Report from company	Border/climate conditions		
		Definition of cavity		
		Material description/λvalues		
		Route description		
		Compliance of product <-> drawing		

		Product	Dimension mm	U_W/U_D		
4	U-value inspector	1 window set	1230*1480			
		4 frame cross mullion window	1230*1480			
		1 leaf French window (equal distribution of glass and balustrade)	990*2090 or 1230*2180			
		1 leaf exterior door	990*2090 or 1230*2180			
5	Customer data company	1 window set	1230*1480			
		4 frame cross mullion window	1230*1480			
		1 leaf French window	990*2090 or 1230*2180			
		1 leaf exterior door	990*2090 or 1230*2180			

Remarks

Annex 9 Basis for assessment of specific errors: PLASTIC PRODUCTS

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. to NDVK Rules
			A	B		
16	**PVC windows and doors**					
16.1	***Profile material***					
	Drag stripes, scratches, chamber tracks, or similar		A		Surface errors are not visible at a distance of 1.5 m. In normal daylight.	
	Contamination of printing ink from protective foil		A			
	Skewed parts of the profile	Skewed parts that may affect the product's function will be assessed as B.	A			
	Lack of reinforcement inserts	Some profile types have reinforcement incasts in the profile. Inserts can then be omitted if the manufacturer allows it.		B	Lack of inserts can be replaced by a "wholly glued" insulation pane according to the manufacturer's instructions.	
	Lack of double wall or reinforcement for fixing screws for fittings.			B	Screws for fittings with heavier loads must be fixed through at least 2 layers of material.	
16.2	***Implementation of work***					
	Dimensional deviations that impair the sealing or function of the element.	Function refers to air and/or rain-watertightness.		B	Exterior casing dimensions: ± 2mm where dimension is < 2m ± 3mm where dimension is > 2m Frame dimensions: (Rebate dimension - 2 x clearance) ± 2 mm	
	Grazes and scratches appearing during processing and handling		A		Surface errors are not visible at a distance of 1.5 m. In normal daylight.	
	Errors during welding	No leakages allowed in the welding joints. Approved strength test.		B	Corners must have a breaking load of 2.5 kN minimum.	
	Leakages in corner connections or interconnections.	Water must not be able to penetrate into places where it cannot drain away. E.g. in chamber, rebate, or similar.		B	Drain holes, or similar, that may lead to water penetrating into a profile are not permitted.	
	No flatness between 2 profiles/subjects	The lipping of the sash rebate for the weatherstrip must not exceed 0.5 mm.	A			
	Errors in milling of exterior corner on welded joint	Pointed/sharp corners are not permitted.	A			
	Beard around millings or on subject ends		A			
	Errors in anchoring of mullion/transom/slat			B	The corner joints and/or connecting sections to transom/mullion must	

Pt.	Description of error	Comments	Error category		NDVK Rules	Ref. to NDVK Rules
			A	B		
					be completely airtight and watertight.	
16.3	***Error in drainage area:***					
	Drainage holes or openings too small	As a rule, there should be a minimum of 2 openings in the bottom piece, or a number of holes giving the same area as 2 openings. This applies to both the casing and the frame.		B	The minimum diameter of the drainage holes must be Ø8 mm or an opening of 5 x 20 mm. The number of drain holes and their position must be such that all water is drained off.	
16.4	***Surface treatment***					
	Difference in colour or gloss		A			

Annex 10 Inspection form for PVC products

Company:	Material type:	Inspector:

Pt.	Area - quality assessment:	Assessment [1]			Comments
	Assessment of product quality	OK	A	B	
1	Visual quality of profiles				
2	Bracing of profiles/product				
3	Quality of workmanship corners				
4	Casing profile - dimensional tolerances				
5	Frame profile - dimensional tolerances				
6	Clearances between casing and frame				
7	Welding of corner joints				
8	Temperature of plates/press time				
9	Draining in casing and frame				
10	Drilling for mounting screws				
11	Any surface treatment				
12	Weather strips (length/corner/pressure)				
13	Fittings and assembly of fittings				
14	Glass and glazing				
15	Glass seals				
16	Glazing beads (mounting and corners)				
17	Components (e.g. sealant)				
18	Type approval (modifications)				
19	U-value calculations				
20	CE marking of products and associated declaration of performance				
21	Order and Cleanliness				

Supplement: Pt. 20, Pt. 21

[1]: **Basis for assessment:** The inspector's assessments are marked with the number of remarks or significant deviations in fields A and B.

Blank field: For inspection not completed, with any additional comments
OK: No remark.
A: Remark.
B: Significant deviation.

Page 2, Annex 10 Inspection Form for PVC Products

Pt.	Area - quality assessment:	Assessment [1]			Comments
	Assessment of quality system	OK	A	B	
1	Quality manual (targets, etc.)				
Are there written procedures for the following:					
2	Document and data management				
3	Deviations management, corrective and preventative measures				
4	Acceptance of goods and acceptance control				
5	Management review				
6	Assessment and approval of supplier				
7	Calibration				
8	Final inspection				
9	Production				
10	Development and modification of product				
11	Training				
12	Handling, storage and packing				
13	How to identify and track the product				
14	Product drawings - Product data sheet				
15	Internal control/HSE				
Are there any work descriptions that cover the following:					
16	Welding of corners				SPLs can be used for all work descriptions.
17	Milling and drilling for fittings, etc.				
18	Surface treatment				
19	Assembly of fittings, sealants, etc.				
20	Hanging of frame in casing				
21	Glazing				
22	Packing and despatch				

Pt. 15: Internal control/HSE (new)

[1]: **Basis for assessment:** The inspector's assessments are marked with the number of remarks or significant deviations in fields A and B.

Blank field: For inspection not completed, with any additional comments
OK: No remark.
A: Remark.
B: Significant deviation.

Place	Date	Signature of inspector	Signature of company's NDVK manager

Annex 11: Template for the management review
Annex 12: Process flow overview
Annex 13: Requirement for solvency
Annex 14: Statistics on the sale of products with brand rights in Norway

Annex 11: Template for the management review

The points that are relevant to the company should be described with their content. Reasons should be given for points that are not relevant.

Company: NN
Present: NN1, NN2, NN3
Lapses: NN6
Date: DD.MM.YYYY
Place: zzzzzzzzzzz
Copy: NN4, NN5
Author: Quality manager

Matters for reporting

1. Report on the latest management review

Descriptions: What has been carried out in the Action Plan from the previous management review, with what effects, and are there issues that still have to be monitored or for which further action is needed?

Decision/conclusion: The decision/conclusion is written here

2. Achievement of targets for quality

Descriptions: Have we reached the targets we have been set for quality; quality targets, process targets, anything else?

Decision/conclusion: The decision/conclusion is written here

3. Results from the monitoring/recording of the processes

Descriptions: How do our processes perform, do they reach their targets; deadlines, use of raw materials, maintenance times, accuracy/precision, and so on

Decision/conclusion: The decision/conclusion is written here

4. Action plans and results from measures implemented

Descriptions: Are there other action plans than those from the management review? For example, are there any from risk assessments, from internal audit, monitoring of suppliers or other

Decision/conclusion: The decision/conclusion is written here

5. Products and services relating to customer requirements

Descriptions: the customer requirements that are set, how we know we are meeting these; here it is not the lack of deviations that is relevant but, for example, intermediate controls, assessments of compliance during the processes, validations/verifications or tests prior to release of a product, or other

Decision/conclusion: The decision/conclusion is written here

6. Changes in internal and external conditions

Descriptions: Has our context changed, have we had any new customers, are there changes in the influence of interested parties, organisational changes, anything else that may affect the impact on the management system

Decision/conclusion: The decision/conclusion is written here

7. Changes in interested parties

Descriptions: Have there been any changes since the last review of the list of interested parties, do we see any changes in the requirements of interested parties and their expectations of us and our products and services

Decision/conclusion: The decision/conclusion is written here

8. External suppliers

Descriptions: the relationship with external suppliers that affects the quality of products and services The need for changes, contractual terms, the need for monitoring

Decision/conclusion: The decision/conclusion is written here

9. Results from internal audits

Descriptions: Description of what audits have been carried out and the main conclusion from these. Have any conditions come to light that it is important to include in further planning for the organisation.

Decision/conclusion: The decision/conclusion is written here

10. Results from complaints and claims

Descriptions: what complaints and claims have been made over the last year. Are there any common features/trends that should be considered in further planning?

Decision/conclusion: The decision/conclusion is written here

11. Results from deviations and corrective measures

Descriptions: how does the deviations system work, is the number of deviations realistic in relation to the scope of activities, is there a reasonable proportion between ordinary deviations and deviations from external and internal audits, as well as complaints/claims? Are there any trends in the statistics material?

Decision/conclusion: The decision/conclusion is written here

12. Customer surveys and other interested parties

Descriptions: what feedback has been received from customer satisfaction surveys, contact with customers, contacts meetings? Feedback from important and relevant interested parties.

Decision/conclusion: The decision/conclusion is written here

13. Risks and opportunities

Descriptions: is the risk picture stable, is there a new for evaluation, would new products and services have given new risks and opportunities, organisational changes, have the initiatives that were decided been monitored and are they effective?

Decision/conclusion: The decision/conclusion is written here

14. Assessment of availability of resources

Descriptions: organisational changes, competence, new products and services, the risk picture

Decision/conclusion: The decision/conclusion is written here

15. Opportunities for improvement

Descriptions: this not only applies to the quality of products and services, but also competence, better understanding of risks, increased loyalty to the management system, all conditions that can improve the effect of the management system itself.

Decision/conclusion: The decision/conclusion is written here

16. Action plan

ID. No.	Activity	Manager	Deadline

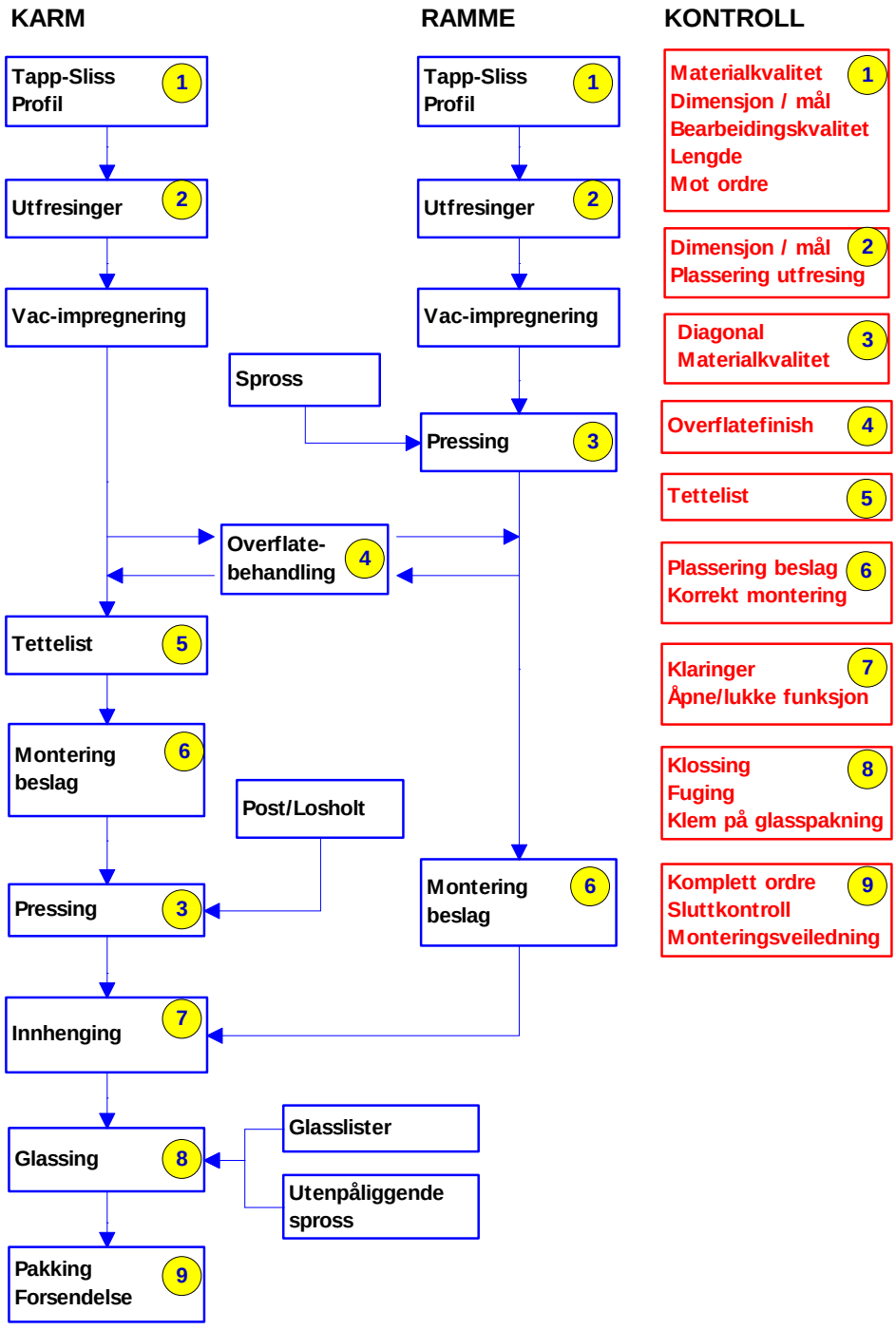
Annex 12: Process flow overview

The company's core processes are described here, such as

1. Offers/Sales/Orders — Ref.: NDVK Rules for Certification and Inspection Visits
2. Production — Ref.: NDVK Rules for Certification and Inspection Visits
   Ref.: NDVK Requirements for windows and exterior doors
3. Mounting (if applicable)
4. Service (if applicable)

Example 1:

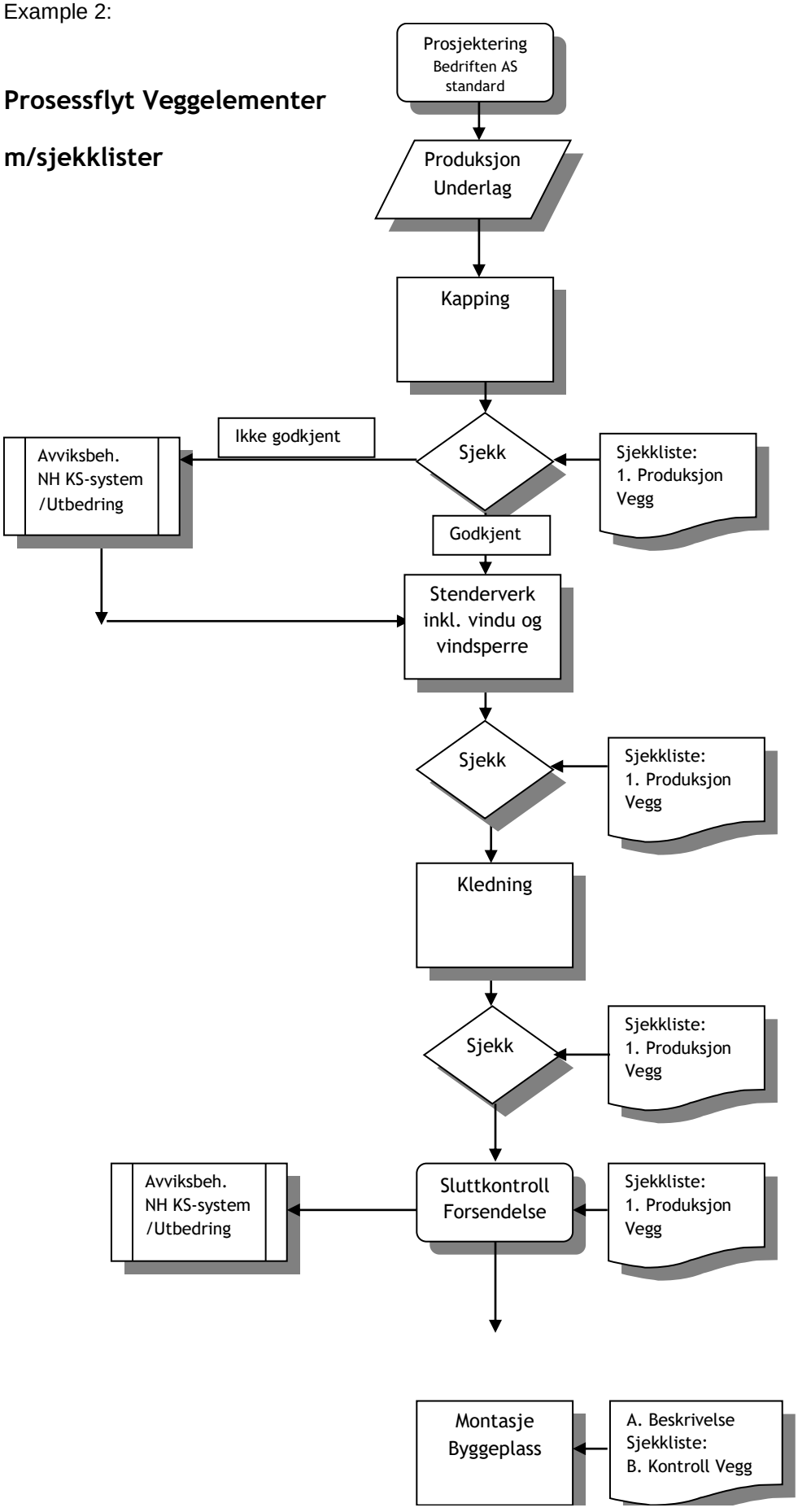
Blue leader lines = Production flow for Windows
Red boxes = Control points and control types of NDVK



Example 2:

Prosessflyt Veggelementer

m/sjekklister



Appendix 13: Requirement for solvency

"Solvency" can be understand as an expression of the company's ability to cover its obligations, and is defined by a factor for the ratio between the sum of "Current Assets" and the sum of "Short-term Debt". The requirement of NDVK is a factor of >1.0.
Current assets/Short-term debt = X. Ref.: Pt. 2.1.16:

Form for information on the company's solvency factor:

Company:	Completed by:	Date:	Sign.
Accounting year:	Sum / Currency	Factor	Factor for previ-ous year
Current assets			
Short-term debt			

The company is (cross):

The parent company ___

A subsidiary company ___

Section with its own accounting ___

Other info _____

_____

_____

Appendix 14: Statistics on the sale of products with brand rights in Norway

Form for information on the company's sales of products with brand rights on the Norwegian market

Cf.: Pt. **Requirements for the quality system**, Page 8:

100% of the window/French window and external door production shall be covered by the certification.
Brand rights shall be owned for at least half the number of types of standard products that the company produces for the Norwegian market. In addition:
At least 80% of the company's total turnover on the Norwegian market must be products with a brand right, measured by number and based on statistics from the previous year. The statistics must be presented to the inspector during the annual inspection visit.

Company:	Completed by:	Date:	Sign.
Products with brand rights (to be stated with type designator as in test report + any trade names)	Quantity	Proportion of products with brand rights	Proportion of total sales
Products without brand rights (to be stated with type designator + any trade names)	Quantity	Proportion of products without brand rights	Proportion of total sales

The company (cross):

Sells directly on the Norwegian market ___

To projects ___

To private customers ___

Only sells via retailers on the Norwegian market ___

Other info _____

_____

_____