GNB-CPD SG18	Guidance from the Group of Notified Bodies for the Construction Products Directive 89/106/EEC	NB-CPD/SG18/05/002 Issued: January 2006 WORKING DOCUMENT

GNB-CPD position paper from SG18 - EN 14081-1

Operating procedure for certification related to EN 14081-1, Strength graded structural timber, Annex ZA

The scope of this position paper is to support the notified bodies to prepare equivalent procedures to issue and maintain certificates of factory production control for both visually and machine strength graded structural timber in conformity with the Annex ZA of EN 14081-1 "Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements.

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1 Foreword

The aim of this position paper is to assist the notified bodies in their work leading to CE marking of strength graded structural timber, Annex ZA of EN 14081-1. Furthermore, the aim is to ensure equivalent working of the notified bodies across Europe.

> NOTE: Although the notified bodies are not responsible for all AC-tasks, these tasks are presented in this working document. It is namely of main importance that the notified bodies are well informed also about the AC-tasks of which the manufacturer is responsible for.

This position paper is prepared by sector group 18 of the notified bodies. It shows the tasks of the notified bodies in the field of the construction products directive given in mandate M/112 and Annex ZA of EN 14081-1. The operation procedure details a system of the factory production control that gives the presumption that products placed on the market are in conformity with the technical specifications given in EN 14081-1 "Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements".

This position paper does not include:

- Timber treated against biological attack.
- Visually graded timber for which the declared strength, stiffness and density values are different from the values given for timber assigned to the strength class system of EN 338 by EN 1912.
- Grading machines operating in an output controlled system.

Sector Group 18 will decide if and when these items shall be included.

> NOTE: This working document is based on the April 2005 versions of all four parts of prEN 14081.

2 Certification process

The attestation of conformity procedure for strength graded structural timber is 2+. A summary of the procedure and the party responsible for the different tasks is given in Table 1.

Table 1. Summary of AC 2+ procedure.

Task	Responsible party	Clarification
Initial type testing and/or assessment, ITT	Manufacturer	The manufacturer shall **carry out** and **document** the ITT
Factory production control, FPC	Manufacturer	The manufacturer shall **establish**, **document** and **maintain** the FPC-system as well as **implement** and **review** it
Testing of samples according to a prescribed test plan	Manufacturer	The manufacturer shall in the FPC-system **include the sampling plan** for the finished product taken at the factory to be tested by himself
Initial inspection of factory and FPC	Notified body	The notified body shall **inspect** and **assess** the factory and the three tasks above and **document** the results
Certification of FPC	Notified body	When the assessment of the initial inspection of factory and FPC is satisfactory the notified body shall **issue** the certificate of FPC.
Declaration of conformity	Manufacturer	After the certificate is issued the manufacturer shall **declare** the conformity of his product
CE marking	Manufacturer	After the declaration of conformity is prepared the manufacturer can **affix** the CE marking but only on products that fulfil the declared characteristics
Continuous surveillance of FPC	Notified body	The notified body shall regularly **inspect** and **assess** the FPC and **document** the results. Based on the assessment the certificate of FPC shall be **maintained** or **withdrawn**

3 Initial type testing and/or assessment

The manufacturer shall carry out and document the initial type testing and/or assessment. An example of a summary report which includes the definitions, classes and the reference documents is given in Annex A.

The manufacturer shall define his product. He shall at least document the species and/or combination of species, growth areas, range of thickness, range of width, range of length and surface finish of the strength graded timber. Furthermore, he shall define if the timber is dry or wet graded. The minimum size of a growth area is one country.

The manufacturer shall test and/or assess as well as document all the characteristics of his product that he intends to declare. The characteristics that may be declared are bending strength, compressive strength, tensile strength, shear strength, modulus of elasticity, durability and reaction to fire.

For almost all relevant species used in Europe the natural durability class (1-5) is given in EN 350-2. For these species no testing is needed. For species not included in EN 350-2 the testing and assessment shall be carried out in accordance with EN 350-1.

For all structural timber of which the mean density is at least 350 kg/m^3 and the minimum thickness is at least 22 mm the reaction to fire class "D-s2,d0" can be declared without testing. For structural timber that does not fulfil these two requirements, or if the manufacturer wishes to declare better values, the testing and assessment shall be carried out in accordance with EN 13501-1.

> NOTE: The timber pieces shall be re-graded if any processing reduces the size more than specified in clause 5.1.2 of EN 14081-1. However, if the effect of processing is covered by the applied grading methods no re-grading is required.

3.1 Visually graded structural timber

For timber visually graded in accordance with any of the grading rules referred to in EN 1912 and assigned to the strength classes given in EN 338 no testing of bending strength, compressive strength, tensile strength, shear strength or modulus of elasticity is needed. However, the manufacturer shall assess each grader to be used.

> NOTE: The grader can partly or fully be replaced by a machine. As long as the grading is carried out in accordance with the grading rules referred to in EN 1912 it is considered as visual grading.

The assessment shall be carried out representatively. This means that each grader shall grade at least three different sizes of representative timber. The number of timber pieces in each size shall at least be 50. The grading shall be carried out at representative mill conditions considering at least the grading line, visibility of

timber to be graded, relevant grading speed and possibilities of using different combinations of grades including reject.

At least 90 % of the timber pieces shall be correctly graded. Furthermore, at least 97 % of the timber pieces shall not deviate more than one grade from the correct grade.

> NOTE: Only those timber pieces wrongly upgraded are grading mistakes. Timber pieces wrongly downgraded fulfil the requirements.

> NOTE: The requirements for assessing the grading should primarily be given in the grading rules. Until these kind of requirements related to representative grading are included the 90 % and 97 % requirements given in this position paper shall be used.

3.2 Machine graded structural timber

Only grading machines and machine settings listed in EN 14081-4 can be used. These machines and their settings have been assessed by CEN/TC124/TG1. Therefore, no testing of bending strength, compressive strength, tensile strength, shear strength or modulus of elasticity, except the machine installation test, is needed.

> NOTE: The machine settings are related to the mathematical models used by the machines. There are different mathematical models for different species and growth areas. Hence, the machine settings can only be used with correct mathematical models and correct model coefficients.

In addition to the machine grading each timber piece shall be visually checked to fulfil the requirements on fissures, warp, wane, soft rot, dote, insect damage and abnormal defects given in clause 5.3.4 of EN 14081-1. For machines that do not fully grade to the ends of the timber pieces, as for example bending type machines, the manufacturer shall additionally visually check these non-fully graded parts in accordance with clause 5.3.5 of EN 14081-1. The manufacturer shall assess each person to be used for these checks.

> NOTE: The person can partly or fully be replaced by a machine.

The assessment shall be carried out representatively. This means that each person shall check at least three different sizes of representative timber. The number of timber pieces in each size shall at least be 50. The checking shall be carried out at representative mill conditions considering at least the grading line, visibility of timber to be graded, relevant grading speed and possibilities of using different combinations of grades including rejection.

At least 95 % of the timber pieces shall be correctly checked.

After the grading machine has been installed the manufacturer shall carry out the machine installation test, clause 6.3 of EN 14081-2. At least 120 timber pieces shall be graded to the highest grade to be declared. Of these every third shall be selected for testing of the grade determining properties (characteristic bending strength, mean modulus of elasticity and characteristic density) in accordance with clause 5.2 of EN 384 (2004) and clauses 7, 10 and 13 of EN 408 (2003). In the edgewise bending tests the tension edge shall be selected at random and the estimated weakest cross section shall be positioned where possible within the centre third of the span. The grade determining properties shall be determined in accordance with clauses 5.3, 5.4, 5.5 and 6 of EN 384 (2004). However, the k_s factor shall not be used. The required grade determining properties shall be calculated in accordance with clause 6.2.5.4 a - c of EN14081-2.

> NOTE: The machine installation test shall be carried out for all individual machines, also for those which already are approved or certified in accordance with national or international requirements.

4 Factory production control

4.1 Factory production control manual

The manufacturer shall establish, document and maintain a factory production control system in a FPC manual to ensure that the products conform to the declared characteristics. All declared characteristics shall be covered either by regular testing of the finished product and/or control of the raw materials, equipment and production process.

> NOTE: Manufacturers which have a FPC manual, which complies with ISO 9000, are recognised as satisfying the FPC requirements only if it addresses all requirements of EN 14081-1.

The FPC manual shall at least include the following items:

- Scope and document handling (application, dates, signatures, distribution, internal review, etc.)
- Organisation, responsibilities of key persons and training of personnel (organisation charts, production manager, quality manager, persons involved in FPC, persons authorized to grade, etc.)
- Definition and control of raw-materials and the control records of it.
- Description of production methods and the control records of it (grading, marking, storing, etc.)
- Description of testing and the control records of it (bending tests for grades above C30)
- List of equipment used both in production and testing and the control and/or calibration of them.
- Handling and marking of non-conforming products (separating, unmarking, corrective actions, preventive actions, etc.)
- Handling and marking of reclaims (corrective and preventive actions, etc.)
- Recording and reporting (internal, notified bodies, customers, etc)

For both visually and machine graded timber the items (species, growth area, size, grading, moisture content if dry-graded and marking) given in clauses 6.3.5 of EN 14081-1 shall be controlled at least once per working shift. The items (competence of personnel and calibration of moisture meter) given in clause 6.3.6 of EN 14081-1 shall be controlled at least annually. The minimum content of the records to be kept for each batch of graded timber (customer, species, grades, grading standard, size, surface, moisture content if dry-graded, date, shift, grader and machine operator) is given in clause 6.3.7 of EN 14081-1.

In the once per working shift control at least 20 graded timber pieces shall be controlled for each grading line, species or species group, grade and grading standard. The grading result shall be determined from the 100 latest controlled specimens. At least 90 % of the timber pieces shall be correctly graded. Furthermore, at least 97 % of the timber pieces shall not deviate more than one grade from the correct grade.

The frequency for control of grading can be reduced to at least two times per week provided the results from the 20 latest once per working shift fulfil the requirement.

> NOTE: Only those timber pieces wrongly upgraded are grading mistakes. Timber pieces wrongly downgraded fulfil the requirements.
>
> NOTE: The requirements for assessing the grading should primarily be given in the grading rules. Until these kind of requirements related to representative grading are included the 90 % and 97 % requirements given in this position paper shall be used.

Additionally, for machine graded timber records shall be kept on the items (yield, settings as well as service, maintenance and calibration) given in clause 6.3.8 of EN 14081-1 and clause 5.5 of EN 14081-3.

> NOTE: Since the mathematical model is an un-separated part of the settings the mathematical model and the model coefficients used by the grading machine shall be recorded.

For both visually and machine graded timber of grades above C30 or D30 (or strictly speaking when the characteristic bending strength is above 30 N/mm^2) the manufacturer shall from each working shift randomly sample at least two timber pieces of each produced grade, clause 6.2 of EN 14081-3. Edgewise bending tests, with the tension edge selected at random and the estimated weakest cross section positioned where possible within the centre third of the span, shall be carried out in accordance with clause 13 of EN 408 (2003). The characteristic bending strength shall be determined from the 100 latest individual test results in accordance with clauses 5.3 and 5.4 of EN 384 (2004). However, the k_s factor shall not be used. The required characteristic bending strength shall be calculated in accordance with clause 6.2.5.4 a - c of EN14081-2.

The edgewise bending test method can be replaced by an alternative strength testing method provided the relationship between the two methods is verified and documented from test data.

4.2 Implementation of the factory production control manual

The manufacturer shall implement and review his FPC manual. Furthermore, he shall document, keep records and report in accordance with his FPC manual.

5 Testing of samples according to a prescribed test plan

Testing of both visually and machine graded timber with a characteristic bending strength above 30 N/mm^2 is handled as a part of clause 4 of this position paper.

6 Initial inspection of factory and factory production control

6.1 Initial inspection of initial type testing and/or assessment

The manufacturer is responsible for the initial type testing and/or assessment (ITT). The notified body shall inspect and document that the manufacturer has carried out and documented the ITT to ensure that the results from the factory production control (FPC) conform to the declared characteristics of the product.

6.2 Initial inspection of factory production control

The manufacturer is responsible for establishing, documenting and maintenance of the factory production control system in a FPC manual as well as on the implementing and reviewing of it. The notified body shall inspect the FPC manual to ensure that the content of it is sufficient to guarantee that the product is in conformity with the declared characteristics. Furthermore, the notified body shall inspect that the manufacturer intends to maintain, implement and review the FPC manual. The notified body shall document the results of his inspection.

> NOTE: Before carrying out the initial inspection of factory and FPC the notified bodies should pre-evaluate the FPC manual.
>
> NOTE: During the initial inspection it may not be possible to inspect that the manufacturer already has fully implemented the FPC manual. The notified body needs to focus on the manufacturer's possibilities and aim to do that. As a part of the forthcoming continuous surveillance of FPC this will then finally be controlled.
>
> NOTE: The notified bodies shall not inspect the graders only the manufacturers' own control of graded timber. This inspection shall be carried out by comparing the controlled grading to the correct grading.

Examples of check lists for the initial inspection of the FPC-manual, visual grading, machine grading and bending tests are given in Annexes B, C, D and E.

NOTE: It is important that the notified bodies understand that the FPC manual is the only reference document when the manufacturer carries out his FPC at the mill and when the notified body regularly inspects that. As long as the FPC manual is followed the quality controller does his work in a proper way. If the quality controller's work is not in agreement with the standard then the FPC manual shall be revised and only after that the control routines shall be updated. However, the manufacturer is not allowed to mark products not in agreement with the standard and the declared characteristics.

6.3 Initial inspection of testing of samples according to a prescribed test plan

The initial inspection of testing of samples according to a prescribed test plan is handled as a part of clause 6.2 of this position paper.

7 Certification of factory production control

The notified body shall issue a certificate of factory production control only when the initial inspection of factory and factory production control has been completely conducted and the result of it is satisfactory. In cases when non-conformity is detected during the initial inspection, all non-conformities shall be dealt with to the satisfaction of the notified body.

An example of this certificate is given in Annex F.

Separate certificates shall be issued for each production mill as well as for visual and machine grading. If the manufacturer wishes to have separate certificates for different species, grades, grading machines etc. the notified body shall issue them.

No expiry date shall be given in the certificate. However, the certificates shall be re-issued when EN 14081-1 is revised.

NOTE: The notified body inspects the FPC at least once per year , or at least twice per year (machine grading), so in general the certificate is issued after each inspection, although not re-written.

NOTE: The year of the standard (EN 14081-1: 2005) is given in the certificate. Hence, the certificate shall be rewritten when a new version replaces an older one.

If the manufacturer extends the definition of the product or changes the raw materials, production methods or production equipment or intends to declare new or revised characteristics the notified body shall, if so desired, carry out a new initial inspection of factory and factory production control before he issues a new or extended certificate on factory production control. In any case the notified body shall assess the changes.

8 Declaration of conformity

The manufacturer shall prepare and retain a declaration of conformity only when the notified body has issued the certificate of factory production control.

The declaration of conformity shall include the items given in Annex ZA.2.2 of EN 14081-1. An example of this declaration is given in Annex F.

9 CE marking

The manufacturer shall affix the CE marking on his product and/or accompanying commercial documents only when he has prepared the declaration of conformity and only when he is convinced that the product fulfils all the declared characteristics.

> NOTE: The marking of each timber piece can only be omitted if the end use requires this for aesthetic reasons and if the manufacturer agrees about it with the notified body.

The CE-marking shall include the information and be given the format given in Annex ZA.3 of EN 14081-1. Two examples of this marking are given in the same annex.

10 Continuous surveillance of factory production control

The notified body shall carry out and document the continuous surveillance of factory production control to ensure that the results from the factory production control (FPC) conform to the declared characteristics of the product.

The FPC visits shall be carried out at least twice per year for machine graded timber and at least once per year for visually graded timber. The notified body decides if further FPC visits are needed when non-conformities in the FPC are identified. The FPC visits shall be carried out as unannounced or announced at the production mill.

During the FPC visits the notified body shall ensure that the manufacturer has implemented all parts of the FPC manual. Furthermore, he shall ensure that the manufacturer only affixes the CE marking on products covered by the certificate of factory production control and fulfilling all the declared characteristics.

> NOTE: The notified bodies shall not inspect the graders only the manufacturers' own control of graded timber. This inspection shall be carried out by comparing the controlled grading to the correct grading.
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> NOTE: If the manufacturer has marked timber pieces with incorrect grades or strength classes then the manufacturer does not handle

his factory production control in a proper way. Non-conformity shall then be raised by the notified body.

The notified body shall use check lists during his control visits. Examples of check lists are given in Annexes B, C, D and E. Since, the FPC manual has in detail been inspected and assessed as a part of the initial inspection of factory and FPC it is not necessary to re-inspect the FPC manual during each visit. The FPC manual inspection should be focused on maintenance, implementation, internal reviews and possible revisions of the FPC manual.

If the notified body determines that the manufacturer has not implemented the FPC manual non-compliance (observation, remark or non-conformity) shall be raised. The manufacturer is then responsible to investigate the cause of the non-compliance and report to the notified body about his corrective and preventive actions.

If the notified body assesses the manufacturers report on non-compliance to be satisfactory he shall then inform the manufacturer about that and keep the certificate of factory production control valid.

If the notified body assess the manufacturers report on non-compliance to be unsatisfactory he shall then inform the manufacturer about that and about the actions he intends to take. If the notified body decides to withdraw the certificate of factory production control he shall promptly inform the manufacturer about that and the reasons for it.

Annex A Summary of ITT

Item	Reference	ITT	Definition / Class / Reference
ITT-1	EN14081-1 5	Product definition: - Species - Growth area - Thickness - Width - Length - Surface - Dry / wet - Further processing	
ITT-2	EN14081-1 5.4.1	Natural durability: - Listed class - Tested class	
ITT-3	EN14081-1 5.5	Reaction to fire: - Listed class - Tested class	
ITT-4	EN14081-1 5.1 5.2	Visual grading: - Strength classes - Grading rules and grades - Graders - Assessment of graders	
ITT-5	EN14081-1 5.1 5.3 6.2 EN14081-3 5 EN14081-4 5	Machine grading: - Strength classes - Combination of classes - Grading machine - Settings and models - Control planks - Rules for visually checking - Persons who check - Assessment of persons	
ITT-6	EN14081-1 5.3 EN14081-2 6.3	Machine installation tests: - Highest grade - Sampling - Test method - Test equipment - Calibration - Testing - Results - Requirements - Assessment of results	

Annex B Checklist for FPC manual

Item	Reference	FPC manual	OK	Non-conformity / Remarks / Observations
FPC-1	EN14081-1 6.3	Document handling: - Established - Documented - Maintained - Implemented - Internal review		NOTE: This check list covers only the FPC manual. The ongoing FPC carried out by the manufacturer is controlled used separate checklists, Annexes C, D and E.
FPC-2	EN14081-1 6.3	Organisation: - Key persons - FPC persons - Machine operators - Graders - Training		NOTE: To be inspected that the FPC manual defines all relevant persons, their competence and their responsibilities.
FPC-3	EN14081-1 6.3	Raw materials: - Instructions - Criteria for acceptance and rejection - Control records		NOTE: To be inspected that the FPC manual defines the raw material. Furthermore, it has to include all control records to be used.
FPC-4	EN14081-1 6.3	Production methods: - Instructions - Criteria for acceptance and rejection - Procedures for supple-mental control and/or tests - Control records - Implementation handled in the check lists for grading, Annexes C and D		NOTE: To be inspected that the FPC manual includes instructions for the whole production. Furthermore, it has to include all control records to be used. NOTE: A more detailed splitting of the production methods is given in Annexes C and D.
FPC-5	EN14081-1 6.3	Tests: - Instructions - Criteria for acceptance and rejection - Procedures for supple-mental control and/or tests - Control records - Implementation handled in the check list for bending tests, Annex E		NOTE: To be inspected that the FPC manual includes instructions for sampling, testing, calibration and evaluation of test results. Furthermore, it has to include all control records to be used.
FPC-6	EN14081-1 6.3	Non-conformity: - Procedures for marking and dispose of marking - Handling of reclaims - Recording		

Annex C Checklist for visually graded structural timber

Item	Reference	Visually graded structural timber	OK	Non-conformity / Remarks / Observations
VGr-1	EN14081-1 6.3.6	Grading conditions: - Training and skill of staff - Grading line - Lighting and visibility - Available instructions		
VGr-2	EN14081-1 6.3.5 6.3.6 6.3.7	Sawn timber: - Species - Growth area - Surface - Sizes - Moisture content and calib-ration of moisture meter - Control records		
VGr-3	EN14081-1 6.3.5 6.3.6 6.3.7	Grading: - Grading rules - Graders - Control of graders - Grading stacks - Control records		
VGr-4	EN14081-1 6.3.5	Finished product: - Further processing - Durability and fire - Markings - Storage		

Annex D Checklist for machine graded structural timber

Item	Reference	Machine graded structural timber	OK	Non-conformity / Remarks / Observations
MGr-1	EN14081-1 6.3.6 EN14081-3 5.2 EN14081-4 5	Grading conditions: - Training and skill of staff - Grading line - Temperature of air - Relative humidity of air - Lighting and visibility - Available instructions		
MGr-2	EN14081-1 6.3.5 6.3.6 6.3.7 EN14081-4 5	Sawn timber: - Species - Growth area - Surface - Sizes - Temperature - Moisture content and calib-ration of moisture meter - Control records		
MGr-3	EN14081-1 6.3.7 6.3.8 EN14081-3 5.5 EN14081-4 5	Grading machine: - Machine type - Grades, machine settings and models - Grading speed - Machine service - Control records		
MGr-4	EN14081-1 6.3.3 6.3.5 6.3.6 6.3.7 6.3.8 EN14081-3 5.3 5.5 6.1	Grading: - Machine operator - Visual checkers - Calibration and/or control planks - Grading accuracy - Grading repeatability - Additional visual checking - Assessment of checkers - Grading stacks - Yield and rejection - Control records		
MGr-5	EN14081-1 6.3.5	Finished product: - Further processing - Durability and fire - Markings - Storage		

Annex E Checklist for bending tests

Item	Reference	Machine graded structural timber	OK	Non-conformity / Remarks / Observations
Ben-1	EN14081-3 6.2	Sampling: - Working shifts - Grading lines - Strength classes - Amount of specimens		
Ben-2	EN14081-3 6.2	Testing: - Machine operator - Method - Weakest cross-section - Tension edge - Equipment - Calibration		
Ben-3	EN14081-3 6.2	Recording: - Date and shift of grading - Date of testing - Species and growth area - Surface - Grade - Sizes - Moisture content - Ultimate load - Time to failure - Bending strength - Failure mode		
Ben-4	EN14081-3 6.2	Evaluation of results: - Declared grade - Required bending strength - Characteristic bending strength from 100 latest test results		

Annex F Examples of documents

This Annex contains examples on a certificate of factory production control and a declaration of conformity.

The certificate of factory production control example is based on the NB-CPD/AG/04/082r2 document that can be fond in Nando. Certificates translated to other languages can be fond in Circa.

The declaration of conformity example is based on Guidance paper D that can be found in Nando.

Logo of the NB

Name and address of the NB

CERTIFICATE OF FACTORY PRODUCTION CONTROL

9876 - CPD - 5432

In compliance with the Directive 89/106/EEC of the Council of European Communities of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to the construction products (Construction Products Directive - CPD), amended by the Directive 93/68/EEC of the Council of European Communities of 22 July 1993, it has been stated that the

Machine strength graded structural timber

produced from spruce (*Picea abies*) or pine (*Pinus sylvestris*),
grown at the extended Nordic growth area and
graded by a Computermatic machine to the strength classes C30, C27, C24, C18 and C16

placed on the market by

Company Ltd
Address

and produced in the

Factory
Address if not the same

is submitted by the manufacturer to the initial type testing of the product and a factory production control and that the notified body "name of NB" has performed the initial inspection of the factory and factory production control and performs the continuous surveillance, assessment and approval of the factory production control.

This certificate attests that all provisions concerning the attestation of factory production control described in Annex ZA of the standard

EN 14081-1:2005

were applied.

This certificate was first issued on dd.mm.yyyy and remains valid as long as the conditions laid down in the harmonised technical specification in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly.

Place and date

Signature

Name
Title, position

Signature

Name
Title, position

Logo, name
and address
of the
Company Ltd

CE

EC DECLARATION OF CONFORMITY

The undersigned, representing the

Company Ltd

and manufacturing plant

Factory

herewith declares that the

Machine strength graded structural timber

is in conformity with the provisions of the EC Directive 89/106/CEE (Construction Products Directive - CPD) when intended to be used for structural applications, and that Annex ZA of

EN 14081-1:2005

has been applied.

The provisions to which the product conforms are given on the reverse side of this declaration.

The notified body "name of NB" has issued the certificate of factory production control 9876-CPD-5422.

Place and date

Signature

Name
Title, position

Characteristic	Performance declaration
Species	Spruce (*Picea abies*) and Pine (*Pinus sylvestris*)
Growth area	Extended Nordic growth area
Range of thickness	30 - 75 mm
Range of width	60 - 250 mm
Range of length	More than 2,0 m
Surface finish	Sawn and planed
Dry or wet graded	Dry graded
Grading machine	Computermatic
Strength, stiffness and density	C30, C27, C24, C18 and C16
Durability	4
Reaction to fire	D-s2,d0