



EN 13964 Suspended Ceilings

Requirements – test methods – CE-marking

Information for building designers, installers and system manufacturers

Explanations expressed reflect the views of TAIM

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Number 02 / updated 31.10.2007



Foreword

Since 1989 the EU Construction Products Directive has harmonised the requirements of construction products. There are currently six essential requirements.

- Mechanical resistance and stability
- Safety in case of fire
- Hygiene, health and environment
- Safety in use
- Protection against noise
- Energy economy and heat retention

These requirements are implemented through

1. harmonised European Standards (EN-standards) or
2. European Technical Approvals (ETA)

In addition, Eurocodes with dimensioning methods are valid for construction components and construction types (e.g. stability of towers, bridges).

In 2004, "Suspended Ceilings" (secretariat: Belgium), the European standard EN 13964 „Suspended ceilings – requirements and test methods“ was created by CEN/TC 277. The European standard exists in three official versions – German, English and French.

The CEN members must now fulfil the CEN/CENELEC rules of procedure, which state the conditions under which this European standard is given without any alteration to the status of a national standard.

CEN members are the National Standardisation Institutes of the countries:

- | | |
|------------------|------------------|
| ▪ Austria | ▪ Latvia |
| ▪ Belgium | ▪ Lithuania |
| ▪ Cyprus | ▪ Luxembourg |
| ▪ Czech Republic | ▪ Malta |
| ▪ Denmark | ▪ Netherlands |
| ▪ Estonia | ▪ Norway |
| ▪ Finland | ▪ Poland |
| ▪ France | ▪ Portugal |
| ▪ Germany | ▪ Romania |
| ▪ Greece | ▪ Slovakia |
| ▪ Hungary | ▪ Slovenia |
| ▪ Iceland | ▪ Sweden |
| ▪ Ireland | ▪ Switzerland |
| ▪ Italy | ▪ United Kingdom |

The National Institute for Germany is:

Deutsches Institut für Normung e. V. (DIN)
(German Institute for Standards)

In June 2004 they published DIN EN 13964: 2004 "Suspended ceilings – requirements and test methods"

Since then, there has been a revised version, DIN EN 13964:2004-06, published in February 2007.

Additional national regulations for Germany

The building regulations test procedures for suspended ceilings in Germany are divided between implementation of EN 13964 and the Bauregelisten B (Construction Products List) part 1 presently number 1.9.5, edition 2007/1, published by the German Institute for Building Technology (DIBT) and are currently as follows:

1. General requirements for building products intended to be marketed: Attestation of conformity procedure and CE marking according to EN 13964:2003-11, in Germany implemented by DIN EN 13964:2004-06.
2. Requirements for the fire resistance class: Construction Products List (as above), Annex 01 in conjunction with the *Landesbauordnung* (building regulations of the land), such as § 34 building regulation NRW.
3. Requirements for the reaction to fire: With the Construction Products List (as above), annex 05, verification is to be carried out for the reaction to fire with the exception of class A1 and E according to DIN EN 13823, pending the resolution of EN 13964 regarding the SBI test, leading to a general technical approval.

Previous and associated standards in Germany

DIN 18168 part 1 version Oct. 1981
Light ceiling linings and underceilings – construction requirements – was withdrawn in June 2004.

DIN 18168, part 2 version Dec. 1984
Lightweight ceiling linings and underceilings – Verification of the load bearing capacity of metal substructures and hangers.

This version still “formally“ exists. However, there is already a replacement (see DIN 18168 part 2 April 2007).

DIN 18168 part 1 April 2007

Ceiling linings and suspended ceilings with gypsum plasterboards - Requirements for construction

The new publication is solely for suspended ceilings made of gypsum plasterboard. This was published in April 2007.

DIN 18168 part 2 draft April 2007

Ceiling linings and suspended ceilings with gypsum plasterboards - Verification of the load-carrying capacity of metal sub-structures and metal suspending rods

This standard was published as a draft in April 2007. It covers: gypsum board, ceiling linings and suspended ceilings in terms of verification of the loading capacity of metal substructures and metal suspension rods.

It is expected that this version will be published in autumn 2007.

1. Key points of EN 13964

The main innovation is that EN 13964 legally stipulates the fulfilments of various requirements and documents them by affixing the CE mark.

Following the coexistence phase, since 1st July 2007, manufacturers of suspended ceilings and substructure components are legally obliged to provide CE marking.

It is not only the manufacturer who is obliged to carry this out but also those that bring the products “onto the market”.

The legal requirement for marking has been postponed several times due to ongoing controversial discussions. These discussions have meanwhile led to the development of various proposed revisions, in which the carrying out of tests according to EN 13964 is done by official “notified bodies“, which at present is not yet binding. The affected „notified bodies“ are organised in working group „SG 01“.



The explanations for this proposed revision ("Amendment 2" to EN 13964) are not given in this document. To what extent these documents lead to changes in the standard is decided by the CEN.

"Amendment 1" has already been adopted, although it contains mainly editorial revisions and is already incorporated into the new edition of DIN EN 13964:2004-06.

The contents of this data sheet refer to DIN EN 13964:2004-06 (February 2007).

The standard also specifies some of the relevant test methods and states how the test results and the corresponding classifications should be evaluated. Many test methods are already part of existing standards. They are also used for other construction products. In EN 13964 they are legally described and defined.

The properties can either relate to an individual product (individual parts as construction components e.g. hangers, main runners, ceiling membranes) or to a complete ceiling system, "kit".

The product properties are to be declared by the manufacturer.

Should individual components from different manufacturers be assembled together, the person responsible, as a rule usually the installer, must himself prove the conformity of the installed components. The CE mark can not be interpreted in any case by designers or installers as a mark of compliance that components from different manufacturers can be used together.

For construction products that are produced individually or in very small quantities, the attestation of conformity, where applicable is alleviated. The manufacturer can confirm the relevant technical specifications of his product with a declaration of conformity without involving a third party.

2. EN 13964 and TAIM

TAIM has actively participated in the creation of the European standard from the start and continues to support the revisions and updates. In light of the work carried out it is important for TAIM to point out that the user should not assume a suspended ceiling with the CE mark has any special quality features. This is not the case, as the mark only regulates the minimum requirements to allow the suspended ceiling to be "brought onto the market". Figuratively speaking this means the product is allowed to leave the site of production.

CE marked products may not be immediately or automatically used in individual EU states if additional national requirements must be considered that deviate or go beyond the requirements of EN 13964.

It should be noted that the manufacturer himself has the responsibility for affixing the mark and therefore suspended ceilings, with the exception of certain fire protection classes, undergo no external or certified testing through a third party monitoring system. Otherwise, everything else is left to the manufacturers own responsibility.

The manufacturer uses the CE mark to confirm conformity to EN 13964 enabling products to be brought onto the market. The CE mark is a legal mark, **not a seal of quality**.

Because the members of TAIM take their association responsibilities seriously and comply with the TAIM quality regulations, which often go beyond the minimum requirements of EN 13964, in the future the TAIM label will have increasing significance.



3. What will EN 13964 change for users and consumers?

EN 13964 covers all products and materials that are used in suspended ceilings for internal use in buildings, for example, metal, wood and mineral fibre ceilings (also prefabricated elements). Conventional plasterboard ceilings do not come under EN 13964; for these the provisions of EN 520 are valid and in Germany the (remaining) standards of DIN 18180/18181 and 18168-1.

EN 13964 provides requirements for ceiling membranes, substructures, parts and accessories. All manufacturers within the European market therefore follow a uniform standard. This leads to the harmonisation of test and evaluation methods and should lead to a simpler assessment of product conformity in connection with the requirements of this standard. The comparison of different ceiling systems is therefore simplified for architects, designers, buyers and installers.

However, EN 13964 opens up the complex possibilities of class assignments (e.g. additional loads), so that the user is required to compare products very accurately.

In addition, the mark can be interpreted differently. This requires close scrutiny by the designers and installers to ensure the well-intended information is not misinterpreted.

TAIM will provide increased support and encourage its members to define a consistent level of quality and uniform marking, in order to give designers and installers clear guidance.

The designer and installer should especially note:

In addition to the CE mark information, all information from the manufacturer and installation guidelines should be respected. The individually CE marked requirement figures only apply for the stated spanning

widths of membranes and substructure profiles, fixing centres and any possible additional loads as outlined in the installation guidelines.

These are therefore necessary for correct design and installation.

4. Performance requirements, which must be declared:

The following, most important performance requirements which are to be declared in the CE mark are:

4.1 Reaction to fire

The building material classification is determined according to EN 13501-1 e.g. A2-s1,d0 (a national classification for example DIN 4102-A2 together with the CE-mark is not permitted).

4.2 Standardised dimensions

Dimensional tolerances and design requirements for standard ceiling substructures and ceiling membrane elements (EN 13964, table 1 to table 5)

4.3 Flexural tensile strength (= loading capacity) of membrane components e.g. a metal tile

Fig. 1: Extract from EN 13964, table 6

Table 6 – Deflection classes

Class	Deflection ^a L (mm)
1	$L^b/500 \leq 4$
2	$L^b/300$
3	No limit

a The maximum deflection arises from the sum of the substructure deflection and the ceiling membrane deflection
 b L is the span in mm between the suspension points

The deflection of a ceiling membrane (or a substructure profile) is assessed according to table 6 EN 13964 in connection with section F 6.1 EN 13964. The safety factor against failure is 2.5. Therefore a ceiling

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membrane must be able to carry at least 2.5 times its own weight. The load test is conducted under the specified climate class where the climatic demand is influential. This is the case with, for example, mineral fibre ceilings, but not with metal ceiling membranes and metal substructures. With metal ceiling membranes, it should also be noted that the deflection for metal ceiling tiles is regulated by EN 13964 table 4 and panels, table 5.

If a ceiling membrane is classified by a manufacturer in class 3, it does not mean a completely "unlimited" deflection. The limits of table 4 (metal ceiling tiles) or table 5 (panels) of EN 13964 have to be adhered to. Therefore the maximum deflection of a 3000 x 625 mm ceiling tile may be 9 mm.

If additional loads are tested, the loading capacity in N (single load) or N/m (linear load) or N/m² (uniformly distributed surface load) should be given.

Example:

Class 2/C/5N means:

The product meets the requirements of deflection class 2 (L/300) in an environment that complies with the conditions of class C and is subjected to a single load of maximum 5 N

Class 1/A/5N/m² means:

The product meets the requirements of deflection class 1 (L/500) in an environment that complies with the conditions of class A and is subjected to a uniformly distributed surface load of maximum 5N/m².

4.4 Loading capacity of the substructure, connectors, hanger components etc.

The products are tested according to EN 13964, section 5.2 and 5.3 and assigned deflection classes (see above). For substructure profiles, connectors, hanger

components etc., at least the loading capacity should be declared i.e. the load that the hanger or load bearing profile can be exposed to whilst complying with the 2.5 safety factor.

Allocation (up till now useful) of the known classes (e.g. allowable $F=0.25\text{kN}$) according to DIN 18168 edition October 1981 is not planned so that the manufacturer states the actual tested values and therefore makes a comparison difficult.

Furthermore, the tested span of substructure profiles is not currently marked. Thus in principle, an installation guide is required for the products of EN 13964. This installation guide is particularly important as the marked loading capacity data must be in agreement with the installation guide.

In the installation guide, the span of the ceiling membrane and the supporting structure must correspond with the marked values for flexural tensile strength and loading capacity.

Without mentioning the tested span, the stated values have no practical significance.

Summary:

The declared values for loading capacity/imposed loads are to be evaluated with caution. It is also extremely important for designers and installers to use the manufacturer's installation and user guidelines to decide the allowable loads of safety-related components.

The stated values can be understood as a point load, linear load or distributed surface load with or without the safety factor. If in any doubt, refer to the manufacturer for the test configurations and/or the exact defined values.

TAIM is developing an overview to ensure uniform information.

4.5 Durability with regards to flexural tensile strength and loading capacity under the influence of humidity.

Currently, 4 classes, A to D are distinguished:

Fig. 2: Extract from EN 13964, table 7 – classes of exposure

Class	Conditions
A	Building components exposed to varying relative humidity up to 70% and varying temperature up to 25°C, but without corrosive pollutants.
B	Building components exposed to varying relative humidity up to 90% and varying temperature up to 30°C, but without corrosive pollutants.
C	Building components exposed to varying relative humidity up to 95% and varying temperature up to 30°C and accompanied by a risk of condensation but without corrosive pollutants.
D	More severe than the above

Table 7 defines 4 ambient conditions as classes of exposure which can be used for suspended ceiling systems (ceiling membranes and substructures).

The minimum requirements for corrosion protection for substructures and ceiling membranes according to table 8 arise from the classification of these exposure classes according to table 7.

Herein, a reproduction of the extensive details of table 8 has not been included.

Table 8 defines the minimum material requirements for the respective exposure classes according to table 7 (see also ISO EN 12944 with regards to increased corrosion protection requirements beyond EN13964).

EN 13964 obliges the manufacturer to mark ceiling membranes with the flexural tensile strength and the exposure class according to table 7. Additionally for ceiling membranes, the durability in terms of corrosion protection according to table 8 should be marked.

For substructure components, EN 13964 only requires marking for durability in terms of corrosion protection according to table 8.

Important note:

The context of the tables and the different marking of ceiling membranes and substructures should be critically evaluated. The correct use of ceiling systems is **primarily** directed by conditions of exposure according to table 7. Nevertheless, suspended ceiling components in terms of corrosion protection can be produced in a higher class than the minimum requirements of EN 13964.

For the marking of durability in terms of corrosion protection of suspended ceiling components, TAIM recommends carrying out the marking according to table 7, even in the case that components have a higher corrosion protection in conjunction with tables 7 and 8.

Substructure components can be marked voluntarily in terms of durability by **both** table values to avoid misunderstandings.

Example: If the substructure is **solely** marked with class D according to table 8, it can not be assumed that the component can also be used in a condition of exposure class D according to table 7. This must be clearly documented in the manufacturer's general information.

For suspended ceiling components made of steel, a "class D according to table 8" mark alone is insufficient. Additional information for the intended use is required (e.g. corrosion protection according to EN 12944 C4L for swimming pools).

4.6 Release of asbestos

Metal ceiling membranes and metal substructures are free from asbestos. No declaration is therefore required with the CE mark.

4.7 Release of formaldehyde

The products are tested in accordance with EN 717-1. This test divides products into two classes, E1 and E2. To achieve class E1, the formaldehyde content may not exceed more than 0.13 mg/m³.

Components that contain neither formaldehyde containing materials nor naturally occurring formaldehyde do not need to be classified and declared in terms of formaldehyde emission.

Metal ceiling membranes without inlays and metal substructures fulfil these requirements. Therefore no declaration is required with the CE mark.

5. Performance requirements, which can be declared:

In addition to these performance requirements, EN 13964 states further properties that can be included with the CE mark:

- 5.1 Direct airborne sound insulation
- 5.2 Sound absorption
The products sound absorption performance is calculated in accordance with EN ISO 354 and rated with a α_w -value according to EN ISO 11654
- 5.3 Impact resistance (ball impact safety)
- 5.4 Thermal conductivity
- 5.5 Shatter properties (only for ceiling membrane components made of brittle materials in ceiling kits)
- 5.6 Reaction and resistance to fire
- 5.7 Electrical safety

When no classification has been made for these properties, „NPD“ (no performance determined) can be used.

Marking these performance requirements is not mandatory within the context of the CE mark, as long as the property is not subject to statutory thresholds.

Many manufacturers make use of this possibility and forgo the use of „NPD“ or only informally declare such properties as

manufacturing information in documents, even if the product has the corresponding properties.

6. Attestation of conformity

One of the key points of EN 13964 outlines the “attestation of conformity procedure“ within construction product law.

Figure 3 below, gives an overview of the attestation of conformity procedures and systems and how they are regulated together with construction product law and EN 13964.

A certificate of conformity or a declaration of conformity from a manufacturer declares that the requirements of EN 13964 are fulfilled, factory production control is in place and the CE mark may be affixed.

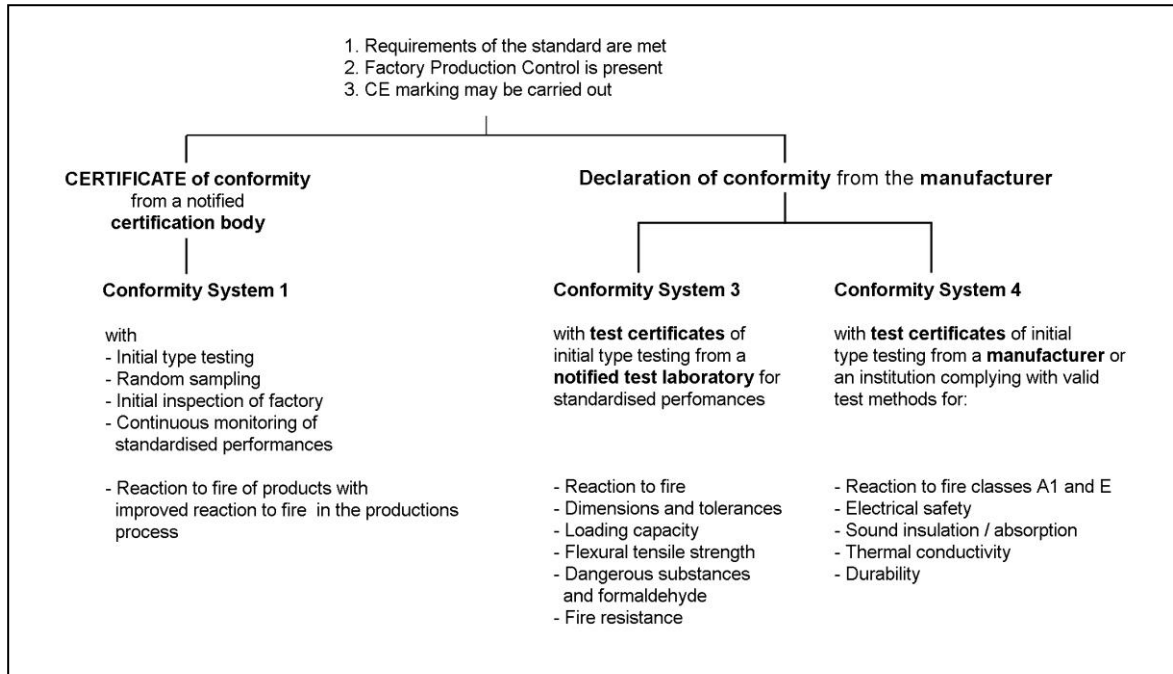
The issuing of certificates is reserved for certification bodies that must be notified by national law.

The tests for test certificates may also only be carried out by test bodies that are notified by national law for the respective tests.

Construction product law in connection with EN 13964 defines which attestation of conformity procedure is to be followed to fulfil the requirements for CE marking.

It remains at the manufacturer's discretion to select the attestation of conformity procedure. The attestation of conformity procedure system 1 is in conjunction with permanent third party monitoring.

Fig. 3 Construction products according to EN 13964 – Attestations of conformity



However, within EN 13964, the **attestation of conformity procedure system 1** is mandatory for products in which a clearly identifiable section of the production process results in an improved fire protection class.

The results are documented in a monitoring report that is included in the EC certificate of conformity following a flawless initial type test. This is prerequisite for the CE mark from the manufacturer.

Attestation of conformity procedure system 3 contains initial type tests from a notified test laboratory. The results are given in one or more test reports from a notified, independent and accredited test body. Prerequisite for attestation of conformity procedure system 3 is that the manufacturer can ensure the consistency of the declared classes during the production process of mass production.

For **attestation of conformity procedure system 4**, it is sufficient for a manufacturer to carry out his own tests. The stated properties can be verified by a test institute, without requiring approval, if valid

test standards have been observed during the tests.

In terms of durability, especially including corrosion protection, many manufacturers are changing to notified institutes for verification according to EN ISO 12944, as long as high value classes are dealt with because EN 12944 is internationally accepted but not covered by TAIM in EN 13964. A TAIM data sheet is currently being produced.

At this point, the reference to **national regulations in Germany** is particularly important.

Fire protection is one of the most important performance requirements of construction products. Normally, national specific regulations are implemented by the DIBT into the building regulations of the states of Germany. According to the current stand (1.7.2007), the attestation of conformity alone in terms of fire characteristics is insufficient in Germany.

With the exception of reaction to fire classification A1 according to EN 13501-1, a

general building regulations approval is also required in Germany for all products whose reaction to fire is not classified as A1 or E.

A separate data sheet will shortly be available from TAIM regarding national approval specifics of metal ceilings in Germany.

7. Regulations for factory production controls:

For Factory Production Control (FPC) according to EN 13964 for suspended ceilings without any requirements for fire and smoke protection and under conformity system 1, the following steps must be carried out by the manufacturer:

- Identification and verification of raw materials and components
- Controls and tests during production at intervals set by the manufacturer
- Checks and tests on finished products/components at intervals set by the manufacturer
- Description of action in case of non-conformity (corrective measures)

The results of the FPC must be recorded, evaluated and retained. The retention period is 5 years.

The records must include the following:

- Marking of the product
- Test methods
- Date of production and consequential tests
- Test results and any comparisons with the requirements
- Signature of the person responsible for FPC

For companies that are certified in accordance with **EN ISO 9001:2000**, the quality management system can only be recognised as an FPC system, when it is adapted to the requirements of the product standard EN 13964.

8. CE marking- regulations and examples

With respect to the purchaser and user, the conformity of suspended ceilings or components of suspended ceilings with the product standard must be documented with the CE mark.

According to EN 13964 the following information must be included:

- The CE mark in its symbolic representation (in accordance with directive 93/68/EWG)



- Name or identifying mark of the manufacturer
- The last two digits of the year in which the mark was affixed.
- Reference to the European standard
- Description of the product: generic name, material, dimensions, etc.
- Intended use e.g. only in conjunction with a certain component etc.
- Information on the relevant, important characteristics

The necessary records are provided in the test report of the initial type test.

Only product values for which threshold values are defined in EN 13964, must be declared.

In this case the option "NPD"(no performance determined) can be inserted as the corresponding performance.

The "no performance determined"(NPD) option may not be used where the characteristic is subjected to a threshold level and regulatory requirements in the destined country.



9. Where should the marking be affixed?

The standard provides 4 possibilities:

- On the product itself
- On a label attached to the product
- On the packaging
- In accompanying commercial documents

The CE mark does not have to be affixed directly to the product/suspended ceiling itself. It is also possible for the mark to be included in accompanying documents (documents that are intended for site) such as the delivery note or the installation and maintenance guide that are supplied with the delivery. Especially for complex performance properties, the manufacturer can make use of declaring these in the accompanying documents, where appropriate in tabular form to document such things as dimensional dependence (external dimensions etc.).

With the CE mark and its affixing, EN 13964 differentiates between:

1. Ceiling kits
2. Components

The standard does not currently regulate to a large extent under which conditions ceiling components are to be treated as ceiling kits.

According to 3.1.4 of EN 13964 a suspended ceiling kit is defined as follows:

“ a set of at least two separate components that need to be put together to be installed permanently in the works. Although the components of the kit may be produced by more than one manufacturer, it has to be placed on the market in a way that enables it to be purchased in one transaction”

According to this definition, suspended ceiling kits as well as substructure kits are possible.

When labelling a kit, the characteristics of the entire kit must be displayed on all components.

TAIM will largely avoid the labelling of its products as a kit and declare all parts of a suspended ceiling system as components.

On the basis of components, the following labels are examples showing typical suspended ceiling components:

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Fig. 4: Example of a CE mark
Example A: suspended ceiling sub-structure component

<i>Full address of the manufacturer, including e-mail/internet/telephone/fax</i>	06
EN 13964 <i>Product description e.g.</i> Main runner type 4711 steel Suspended ceiling substructure component for use internally in buildings	1.
Reaction to fire: Class A2-s1, d0	2.
Loading capacity: load bearing performance 1400 N	3.
Durability: Class D acc. to table 8 Class C acc. to table 7	4.
Used according to the manufacturers instructions and system installation guidelines	


1. The standard (including version) that the mark refers to. In this example EN 13964:2004-06.
2. In this example, a main runner profile of building material class A2 (non-combustible), smoke development class s1 and burning droplets class d0 as classified according to EN 13501-1.
3. The load bearing capacity of the main runner is 1400 N as a point load. The specification of a deflection class is not required. The span at which the test was carried out does not have to be stated as in this form it has no practical value and is only meaningful in conjunction with the information supplied in the installation guidelines.
4. A product that meets exposure class C according to table 7. The product is provided with high quality corrosion protection according to table 8.

Fig 5: Example of a CE mark for a suspended ceiling membrane component

<i>Full address of the manufacturer, including e-mail/internet/telephone/fax</i>	06
EN 13964 : 2004 <i>Product description e.g.</i> Metal ceiling tile Suspended Ceiling – membrane component for use internally in buildings	
Reaction to fire: Class A2-s1, d0	
Flexural tensile strength: Class 3/A 15N/m2	1.
Durability: Class A acc. to table 8	2.
Used according to the manufacturers instructions and system installation guidelines	

1. The product meets the requirements of flexural tensile strength class 3 (“unlimited”) in an exposure class A environment and with an additional load of 15N/m ² . The metal tile has been approved for a surface load of 15N. This corresponds roughly to the weight of an inlay mineral wool board.
2. A product with Class A corrosion protection according to table 8

Fig 6: Example of a CE mark for a suspended ceiling substructure component

	
<i>Full address of the manufacturer, including e-mail/internet/telephone/fax</i>	06
EN 13964 : 2004 <i>Product description e.g. hanger top part</i> Suspended ceiling substructure component for use internally in buildings	
Reaction to fire: Class A1 acc. to EN 13501-1 Loading capacity: Load 350 N Durability: Class B acc. to table 8 Class B acc. to table 7	1.
Used according to the manufacturers instructions and system installation guidelines	

1.

A top part hanger with Class B corrosion protection according to table 8.

It is also acceptable to only mark the accompanying documents in text form. However, the CE mark in its symbolic representation (logo) must be used.

10. Declarations and certificates of conformity

When the product has fulfilled the requirements of the standard, the certification body shall draw up a certificate of conformity or the manufacturer produces a declaration of conformity. This declares that the suspended ceilings produced by the manufacturer have met the requirements of EN 13964 and they are therefore entitled to affix the CE mark.

Declarations and certificates of conformity are produced on a product basis. An object based proof of conformity is not provided.

The declaration is to be provided in the language of the country where the product is intended for installation (in the future this will probably change so that it can also be a language that is accepted by the building regulations in the country of use). EC declarations and certificates of conformity remain with the manufacturer. An official authority has the right to inspect these documents, usually a national building authority.

Members of TAIM can provide EC declarations of conformity on request.

According to EN 13964, the following information must be included in a manufacturer's declaration of conformity:

- Name and address of the manufacturer or his authorised representative established in the EEA and place of production.
- Description of the product (type, identification, use etc.) and a copy of the information accompanying the CE mark.
- Particular conditions applicable to the use of the product.
(e.g. provisions for use under certain conditions, etc.)
- Provisions to which the product conforms
- Name and address of the notified laboratory(ies) where the tests were carried out.
- Name of and position held by, the person empowered to sign the declaration on behalf of the manufacturer or his authorised representative.

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Figure 7 is a sample of a manufacturer's declaration of conformity.

Fig 7: Example of a manufacturer's declaration of conformity

In compliance with 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 construction products (Construction Products Directive - CPD), amended by the Directive 93/68/EEC of the Council of European Communities of 22 July 1993, it is confirmed that the products

Suspended ceiling component according to EN 13964
intended for use internally in buildings; reaction to fire class A1;
flexural tensile strength: class 1 etc.

Placed on the market by the manufacturer:

Name
Address

Produced at the factory location

Name
Address

are subject to factory production control procedures and are submitted by the manufacturer to further testing of samples taken at the factory in accordance with a prescribed test plan and the stated Notified Certification Body number

Test body

has performed the initial type-testing for the relevant characteristics of the product and has conducted the initial inspection of the factory and the factory production control on the dd.mm.yy, and is responsible for the continuous surveillance, assessment and approval of the factory production control.

This document certifies that all the provisions concerning the attestation of conformity and product performance described in Annex ZA of the product standard

EN13964: 2004

were applied and that the product fulfils all the prescribed requirements.

This certificate was first issued on dd.mm.yy, and revised on dd.mm.yy, and remains valid as long as the conditions laid down in the harmonised technical specification above, or the product design or the manufacturing conditions in the factory, or the FPC itself are not modified significantly, or at the latest dd.mm.yy.

Place, Date

Signature

(person responsible for quality of the manufacturer)

Different products can be included in one declaration of conformity

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11. Requirements of the installer

For the installer, it means that he is bound to exclusively using correspondingly marked components of a manufacturer, as otherwise he is in danger of installing illegitimate components and therefore would violate EN 13964.

If an installer combines components from different manufacturers, he is himself responsible for the conformity. That is, he must verify the suitability of the selected components for the intended use, according to the requirements of EN 13964 and prepare a declaration of conformity.

Example: The installer uses a hanger component alien to the system with a main runner from a different manufacturer.

In this case, the hanger component with the utilised main runner is subject to the corresponding tests of EN 13964 and the test results declared by a notified certification body. The installer must then provide an attestation of conformity for this product.

12. Outlook

In Germany awareness is now being raised for users to move away from the familiar regulations of DIN 18168, edition October 1981.

In particular, it should be noted that the regulations for corrosion protection according to the old DIN 18168-1, edition October 1981 with the familiar table 2 with regards to protection classes, zinc thickness e.g. external air access etc. now only apply to ceiling coverings and suspended ceilings with gypsum board ceiling membranes, as is table 1 "material characteristics and minimum dimensions of metal hangers", with the listed minimum material grades.

In practice, the manufacturers are now required to take personal responsibility to

establish definitions e.g. of the employed material quality (minimum yield strengths) of metal substructures and perform checks to avoid the risk of falling short in the measurement of proven values in the series of initial type tests, as up till now EN 13964 has neglected to include such guidelines for the minimum material quality.

The aim of this European standard is to standardise the important requirements of construction products (see foreword) and to simplify comparisons of the different ceiling systems for architects, designers, buyers and installers. To what extent this is successful, must be first seen in practice.

Due to the extensive range of marking options, it is advised to proceed with caution. TAIM, in any case, will provide improved information and encourage its members to continue to provide a transparent, high level of quality that goes beyond the requirements of EN 13964.

The basis for this is the Technical Manual on Metal Ceilings published by TAIM, www.taim.info.

Note:

The contents of this data sheet represent the opinions of the members of TAIM at the time of publication at a European level. Compliance with national regulations is particularly referred to.

TAIM expressly states that it can in no way be liable for the accuracy of this content.