Kan design som säljer vara ett problem för vattenskadesäkerhet och för att bygga lagligt? 30 August 2019

Sten Kloppenborg Team Manager, Danish Technological Institute, VA Testing and Inspection

Agenda



- Requirements for building components in water installations in Denmark
- What is the impact of a material certificate?
- How do you being an ordinary user know that a building component is legal?
- The NKB test of the finished product may be a solution



BR 18 Mechanical/physical requirements

418. Factory-made products which form part of or are connected to water installations must have the following mechanical/physical characteristics:

1) They must have a CE-marking stating that the products are in accordance with a harmonised standard or are covered by a European technical assessment with the characteristics declared which are relevant to Denmark, or

2) They must have undergone testing of the characteristics which are relevant to Denmark and have undergone production checks at the factory to ensure that the performance declared is maintained as described in Chapter 24. Operation

BR 18 Danish Building Regulation Construction materials and products for water installations



			TEKNOLOGISK INSTITUT
**** **** ETA DANMARK	ų	Godkendelse VA 1.42/20864 dstedt: 2019.01.11 tyldig til: 2022.01.01	Søg efter godkende
GODKENDELSESINDEHAVER:	Dokumentation af mekanisk Blandearmatur til køkkenvas FLAIR type 30.276.xx2 MINTA type 31.358.xx2	ofylder kravene i BR 18 e/fysiske karakteristika for: sk	MINISPRAY model 76000 og 76200
3.2 Vandvarmere 3,21/18254 3,21/18255 3,21/18412 3,21/18452 3,21/18563 3,21/19898 3,21/19899	Varmtv.beh./fjernvarme Varmtvandsbeholder Varmtv.beh./fjernvarme Varmtv.beh./fjernvarme Varmtv.beh./fjernvarme Varmtv.beh./fjernvarme Varmtvandsbeholder	METRO COMBI 605 C mfl. METRO 2242 og BATEC 200L mfl. GEMINA TERMIX BTD og BVX, str. 70, 100, ARO UNIVERSAL, AROFLEX, 85 L METRO COMBI Metrosaver 200 mfl. Metroaqua 300/200 mfl.	120 og 150 liter
3,22/19700 3,22/19896 3,22/20329 3,23/19150 3,23/19559 3,23/20565	Pladevarmeveksler Gennemstrømningsvandvarmer Gennemstrømningsvandvarmer Vardvarmer/el Vandvarmer/el Varmtvandsbeholder/el-opv. Kogende vandhane system	GEMINA TERMIX BV-UNIT, TERMIX 16, TER NOVI, TERMIX VVX-UNIT og TERMIX VMTD METRO MINI 11, 11MF og 18 METROMINI 4MX GROHE RED 40.416.000 og 40.417.000 METRO 605, 2016ECO, 611, 622, 206ECO, 2004 ProSource	MIX 24, TERMIX 24P, TERMIX 100, TERMIX ONE, TERMIX 644, 211ECO, 655, 905, 906, 907, 908, 910, 2002, 2003,
3,23/20783 3,29/18788 3,29/20680	Varmeveksler/varmegenvinding Varmeveksler/varmegenvinding	GROHE RED NG 30079001, 300790C1, 300 30325DC1, 30327001, 30327DC1, 30.320.0 Q-BLUE showersave QB1, 12, 16 og 21, Mu EIDT Z 4	80001, 30085001, 30083001, 30083DC1, 32325001, 000 IbVert MV

BR 18 Health related requirements



416. Water installations must be made from materials which do not give off substances that constitute a health hazard, malodour, bad taste, discoloration or offensive growth of microorganisms to the water. This requirement concerns all materials used for the installations, e.g. pipes, fittings and gaskets.

417. Factory-made products which form part of or are connected to the permanent drinking water installations up to and including the tap must be approved by the Transport, Building and Housing Agency in terms of properties which may influence the quality of the drinking water, see the Executive Order on water quality and control of water supply systems, unless the product in question is exempt under the **Executive Order on marketing and sale of construction materials which come into contact with drinking water**.

Bek 33, April 2014 (GDV)



BR 18 Danish Building Regulation *Construction materials and products for water installations*

BR 18 Health related requirements



3. In order for the building components covered by section 1(1) to be placed on the market or sold, it must be documented that the building component as a whole or the subassemblies in contact with water of which the building component consists:

- 1) are approved by the Secretariat for Approvals, cf. section 5(1) in this Executive Order;
- 2) 2) are certified in Germany in accordance with the scheme that is applicable in Germany;
- 3) 3) are approved in the Netherlands in accordance with the scheme that is applicable in the Netherlands; or
- 4) 4) are type-approved in Sweden



Bek 1007, June 2016 (GDV)

From material via material certificate to approval





From approval to finished product







Productcertificaat K92471/02



Ultgegeven 2018-04-05 Vervangt K92471/01 Pagina 1 van 6

Watermeters

VERKLARING VAN KIWA

Met dit, conform het Kiwa-Reglement voor Productoertificatie, afgegeven productoertificaat verklaart Kiwa dat het gerechtvaardigd vertrouwen bestaat dat de door

Sensus GmbH Ludwigshafen

geleverde producten, die zijn gespecificeerd in dit oertificaat en voorzien van het onder "Merken" aangegeven Kiwa®-keurmerk, bij aflevering voldoen aan Kiwa-beoordelingsrichtlijn

BRL-K618 "Watermeters": 2012-02-01.

waarvan de eisen uit

NEN-EN-ISO 4064-1:"Watermeters bestemd voor koud en warm drinkwater- Deel 1: Metrologische en technische eisen"

NEN-EN-ISO 4064-2:"Watermeters bestemd voor koud en warm drinkwater- Deel 2: Beproevingsmethoden"

NEN-EN-ISO 4064-4:"Watermeters bestemd voor koud en warm drinkwater- Deel 4: Nietmetrologische eisen die niet in ISO 4064-1 worden behandeld"

onderdeel uitmaken.

- PTA Luc Leroy

Kiwa Openbaarmaking van het certificaat is toegestaan.

Advies: raadpleeg www.kiwa.nl om na te gaan of dit certificaat geldig is.

Klwa Nederland B.V. Sir Winston Churchilliaan 273 Postbus 70 2290 AB RUSWUK

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afen Brinck Meter Control Services Tweespan 14 1 3897 AC ZEEWOLDE Tel.036 5479560 Fax036 5479555 think@brinck.nl www.brinck.nl

Certificatieproces bestaat uit initiële en periodieke beoordeling van: • kwaliteitssysteem • product





The rules make it difficult for the manufacturers and the importers



Result of the market surveillance of October 2018:

- The Danish Transport, Construction and Housing Agency tested six taps and 11 softening units from 17 randomly selected internet shops. Four of the taps and seven of the softening units were not approved for the Danish market.
- The market surveillance resulted in six police reports. In addition, several internet shops were told either to remove the products from their website or to clearly write that the products were not approved for drinking water.

The surveillance was carried out as a document review



From material via material certificate to approval





A shorter way from product to approval by sing the NKB test of finished products



- For 40 years, the NKB test has been used for testing of brass alloys in the Nordic countries.
- The NKB test can be used for testing of lead, cadmium and nickel.
- The finished product is tested as an assembled unit, and only components in contact with water are included.
- The duration of the test is 10-15 days.
- The traceability problems are limited.
- The test can be used directly by the market surveillance scheme.
- The NKB test is accepted in the Nordic countries and in Switzerland.

The NKB migrationtest might need an update -





CEN TC 164 WG 3 There is a demand for short-term test methods

TEKNOLOGISK







Conclusions



- In Denmark, the requirements for building components in water installations have resulted in a certificate chaos with various levels of requirements.
- It is almost impossible for ordinary users to determine if the rules and regulations are observed.
- NKB test of finished products may be part of the solution – also at a European level.



Thank you for your attention

Sten Kloppenborg