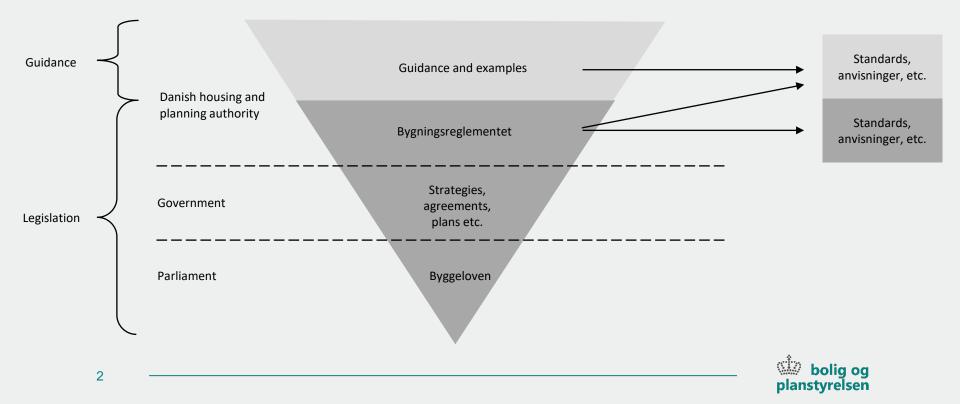






Nordic Building regulations – Denmark, Norway, Sweden





# Water and sanitary drainage installations are supported by standards and "alment teknisk fælleseje "

### **Indicative of level**

- DS 432:2020 Afløbsinstallationer
- DS 439:XXXX Norm for vandinstallationer (under revision)
- DS/EN 1717:2002 Sikring mod forurening af drikkevand i vandinstallationer
- DS/EN 806-5:2013 Specifikationer for drikkevandsinstallationer i bygninger Del 5: Drift og vedligehold
- Rørcenter-anvisning 015 Tilbagestrømningssikring af vandforsyningssystemer
- Rørcenteranvisning 017 Legionella Installationsprincipper og bekæmpelsesmetoder

### Legal requirement

- DS 436:1993 Norm for dræning af bygværker mv.
- DS 452:2013 Termisk isolering af tekniske installationer

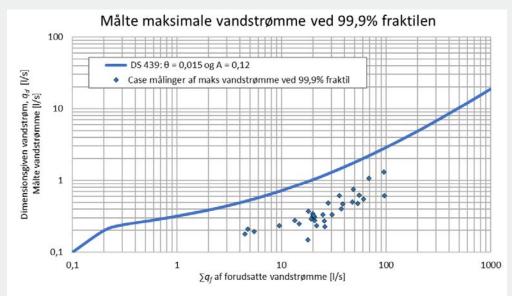


### **Revision of DS 439**

- Topics include (among other things)
- Deals with new materiales in the building sector (however, not the parts that fall within the scope of the Drinking Water Directive)
- New technology
- Dimensioning installations for drinking water
- ... and other relevant topics

### **Revision of DS 439**

#### • Dimensioning installations for water





Figur 5 Målte maksimale vandstrømme ved 99,9 % fraktilen sammenholdt med dimensioneringsmetoden i DS 439.



## **Sustainability**

Life Cycle Analysis

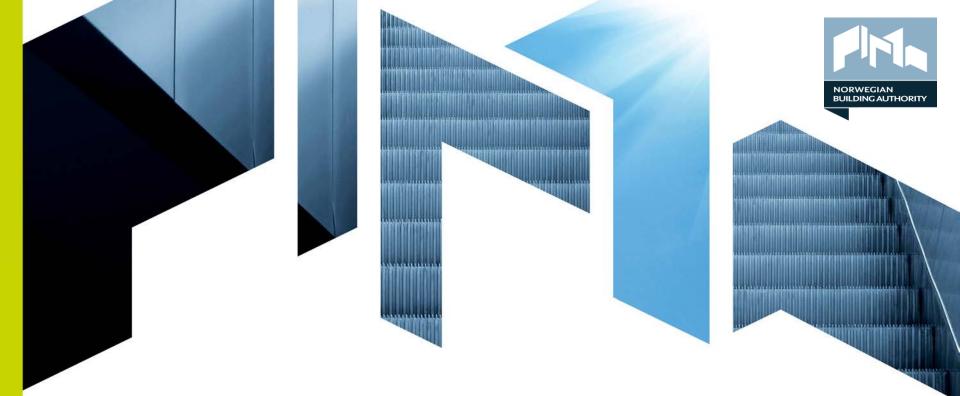
The first of January a LCA limit for new buildings larger than 1.000 m<sup>2</sup> are expected to enter into force. Smaller buildings will not have to meet the limit, but must declare the result of the LCA calculation.

The LCA-calculation will include some materials used for water and sanitary drainage, but not the water consumption itself. It will be possible to choose between actual and default values.

It is expected that the LCA-requirement will be expanded as more knowledge is gained.







### Changes in the building regulations – what's happening in Norway

Brit Roald, Norwegian Building Authority (DiBK)

# Changes in the Building regulations – what's happening in Norway?



Yearly assignment letter from Ministry of Local Government and Regional Development

### 2022 - Goal no. 3:

Norwegian Building Authority (DiBK) shall be a driving force for digitalization and simplification of the building code

### Development of the building code (TEK17) with guidelines

# Development of the building code (TEK17) with guidelines

requirements



**TEK17:** Primary and qualitative functional requirements To understand and satisfy the functional requirements Guidelines Often includes «pre-accepted performance levels» • Often regarded as demands/requirements «Pre-accepted Uncertainty as to what the building code performance levels» actually requires Starting work on a new structure where the current «Pre-accepted performance levels» are Digitalization included More digitalization and preparation for automatic checking of the technical



Swedish National Board of Housing, Building and Planning

# New model for the Swedish building regulations

Madeleine Hjortsberg, Boverket



Boverket's building regulations are being modernised and simplified. Same level of requirements. Clarify the roles in the process: the authorities set the requirements and the building sector comes up with solutions that fulfill the requirements.

Innovation New solutions Flexibility

Will come into force ≈ July 1, 2024 Referral ≈ December 2022

Samhällsbyggandets regelforum will coordinate the new role for the building sector.



#### New model **Present model** Building General recommendations, General recommendations, sector, examples of acceptable solutions, Verification examples of acceptable solutions, Verification standardisa standards standards tion etc Boverket Buildings regulations with Buildings regulations with Boverket mandatory provisions mandatory provisions Government Ordinance Ordinance Government Mandatory Mandatory requirements requirements Law/act Law/act Parliament Parliament

## Boverket Changes that will affect water and drainage.....

- Energy saving versus hot water temperature
- Water saving versus water flow
- Increased interest in using water other than drinking water for toilets, washing machines, showers etc
- EU Drinking Water Directive came into force Januari 1 2022. Material in contact with drinking water – regulates health impact, not **durability** or sustainability. Work in progress!