CEN/TC 442 WG4 TG2

Product Data Templates
based on CEN/CENELEC standards, stored in a
European data dictionary framework

Lars Chr. Fredenlund,
- CEO, coBuilder
- Member buildingSMART International Product Room
- Member of bSDD Advisory Board

Espen Schulze, coBuilder
- Expert CEN/TC 442 WG4
  - Chair Task Group 2 – Product Data Templates
- Member buildingSMART International Product Room
  - Chair buildingSMART International Product Data Template
    Working Group
- Expert ISO/TC 59/SC13 WG11
- Committee member SN/K 257
CEN/TC 442

Building Information Modeling (BIM)

Standardization in the field of structured semantic life-cycle information for the built environment.
CEN/TC 442

- Working Group 1 - Strategy and Planning
- Working Group 2 - Exchange information
- Working Group 3 - Information Delivery Specification
- Working Group 4 - Support Data Dictionaries
CEN/TC 442

- Working Group 1 - Strategy and Planning
- Working Group 2 - Exchange information
- Working Group 3 - Information Delivery Specification
- Working Group 4 - Support Data Dictionaries
  - Task Group 1 (expert process)
  - Task Group 2 (Product Data Template)
NWIP 3 - Part 1 General structure of a product data template

COMMENTARIES / DECISIONS

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 1: General structure of a product data template and how to relate it to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Documnet 21.

FOLLOW UP

Meeting on 2016-09-13

SOURCE

CEN/TC 442WG 4 Secretariat

NWIP 4 - Part 2 Framework for product data templates under CPR

COMMENTARIES / DECISIONS

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 2: Framework for product data templates based on harmonised technical specifications under the Construction Products Regulation (CPR), and how to relate the product data templates to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Documnet 21.

FOLLOW UP

Meeting on 2016-09-13

SOURCE

CEN/TC 442WG 4 Secretariat
NWIP 3 - Part 1 General structure of a product data template

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 1: General structure of a product data template and how to relate it to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Document 21.

FOLLOW UP
Meeting on 2016-09-13

SOURCE
CEN/TC 442/WG 4 Secretariat
Doc 1 - General structure of a Product Data Template (PDT)
Doc 1 - General structure of a Product Data Template (PDT)
NWIP 3 - Part 1 General structure of a product data template

COMMENTARIES / DECISIONS

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 1: General structure of a product data template and how to relate it to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Document 21.

FOLLOW UP
Meeting on 2016-09-13

SOURCE
CEN/TC 442/WG 4 Secretariat

NWIP 4 - Part 2 Framework for product data templates under CPR

COMMENTARIES / DECISIONS

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 2: Framework for product data templates based on harmonised technical specifications under the Construction Products Regulation (CPR), and how to relate the product data templates to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Document 21.

FOLLOW UP
Meeting on 2016-09-13

SOURCE
CEN/TC 442/WG 4 Secretariat
Doc 2 – Framework for Product Data Templates under CPR

- EN 13162
- Stone wool insulation
- Thermal resistance
- Thermal resistance according to EN 12939
- EN 12939
- m².K/W
Doc 2 – Framework for Product Data Templates under CPR

Multiple test methods
Why Construction Products Regulation (CPR) and harmonised standards?
Construction Products Regulation (CPR)

- Lays down **harmonised rules** for the marketing of construction products in the EU
- Provides a **common technical language** to assess the performance of construction products
- Ensures reliable information is available to professionals, public authorities, and consumers, so they can **compare the performance of products** from different manufacturers in different countries
CPR - BASIC REQUIREMENTS FOR CONSTRUCTION WORKS

1. Mechanical resistance and stability
2. Safety in case of fire
3. Hygiene, health and the environment
4. Safety and accessibility in use
5. Protection against noise
6. Energy economy and heat retention
7. Sustainable use of natural resources
CPR - BASIC REQUIREMENTS FOR CONSTRUCTION WORKS

1. Mechanical resistance and stability
2. Safety in case of fire
3. Hygiene, health and the environment
4. Safety and accessibility in use
5. Protection against noise
6. Energy economy and heat retention
7. Sustainable use of natural resources

Harmonised standards (CPR)

Eurocodes

National building regulations (Europe)
Construction Products Regulation (CPR)

Harmonised standards

- Thermal insulation products for buildings — Factory made expanded polystyrene (EPS) products — Specification
- Gypsum plasterboards — Definitions, requirements and test methods
- Sealsants for non-structural use in joints in buildings and pedestrian walkways
- Specification for masonry units
- Windows and doors — Product standard, performance characteristics — Part 1: Windows and external pedestrian elements
PDT creation process
EN 13162 - thermal insulation products for buildings - factory made mineral wool (MW) products - specification

Annex ZA

Essential characteristics

- Reaction to fire
  - EN 13501-1
- Thermal resistance
  - EN 12939
- Tensile strength
  - EN 1607

Declaration of Performance
Espen Schulze

None-Essential characteristics

Racking resistance
EN 14608

Burglar resistance
EN 14351-1

Essential characteristics

Thermal resistance
EN 12939
ISO 12667

Reaction to fire
EN 13501-1

Tensile strength
EN 1607

Common European technical language

CPR

EN 13162 - thermal insulation products for buildings - factory made mineral wool (MW) products - specification
Data dictionary based on EN ISO 12006-3
Common European technical language in a data dictionary based on EN ISO 12006-3

Essential characteristics
- Thermal transmittance
  - EN ISO 10077-2
  - EN ISO 12567-2
- Resistance to fire
  - EN 13501-2
- Watertightness
  - EN 1027

None-Essential characteristics
- Racking resistance
  - EN 14608
- Burglar resistance
  - EN 14351-1
Common European technical language in a data dictionary based on EN ISO 12006-3

Essential characteristics
- Thermal transmittance
  - EN ISO 10077-2
  - EN ISO 12567-2
- Resistance to fire
  - EN 13501-2
- Watertightness
  - EN 1027

None-Essential characteristics
- Racking resistance
  - EN 14608
- Burglar resistance
  - EN 14351-1

Expert process (PPBIM)
Espen Schulze

Common European technical language in a data dictionary based on EN ISO 12006-3

Global Unique Identifier (GUID)

Essential characteristics
- Thermal transmittance
  - EN ISO 10077-2
  - EN ISO 12567-2
- Resistance to fire
  - EN 13501-2
- Watertightness
  - EN 1027

None-Essential characteristics
- Racking resistance
  - EN 14608
- Burglar resistance
  - EN 14351-1

One name and definition
Translations
The IFC standards objects and properties in a Data Dictionary

EN ISO 16739
Ifc properties are linked with properties from CEN/CENELEC standards in a Data Dictionary.

Essential characteristics:
- Thermal transmittance
  - EN ISO 10077-2
  - EN ISO 12567-2
- Resistance to fire
  - EN 13501-2
- Watertightness
  - EN 1027

None-Essential characteristics:
- Racking resistance
  - EN 14608
- Burglar resistance
  - EN 14351-1
One single European approach, mandatory for all European member states
One single European approach, mandatory for all European member states

National requirements
Alignment with Smart CE marking
CEN/TC 442

Data structure

Data request/delivery

Model

IFC

Espen Schulze

Data structure request/delivery Model
THANKS
Lars Chr. Fredenlund

WWW.COBUILDER.COM

WWW.GOBIEM.COM

fredenlund@cobuilder.com

+47 957 24 990

FOLLOW US

FACEBOOK
WWW.FACEBOOK.COM/cobuilder.international

LINKEDIN
WWW.LINKEDIN.COM/cobuilder-as

TWITTER
WWW.TWITTER.COM/cobuilder_international