BuildingSMART Data Dictionary
(IFD Library, Barbi/Lexicon)

By David Watson, CET, FCSC, CSP
2014-06
CAD-Specs
The fundamental Problem
Understanding the meaning of digital information

The DATA DICTIONARY is about the MEANING OF THINGS rather than the naming of things.

I actually prefer to be called Steve.
objective

General
- Submit drawings
- 5 yr warranty

Products
- Porcelain
- Floor mounted, tank type

Execution
- Install after flooring

BIM View
Water Closets, wall hung, tankless

Specification View
bSDD – How does it work?

• CAD (BIM) Model
  – bSDD GUID = xyz
  – Name = “ceiling panel”
  – Length =
  – Width =
  – Thickness =
  – Geometric position (x, y, z)
  – Quantity

• Data Source (eg. master specification)
  – bSDD GUID = xyz
  – Name = “acoustic panel”
  – STC Rating =
  – Flame spread resistance =
  – Install into suspended t-bar
  – Submit shop drawing
bSDD / IFD mapping mechanism

In a briefing document
- Properties

In product catalogues
- Properties

In classification systems
- Properties

In building specifications
- Properties

In a CAD system
- Properties

In a calculation system
- Properties

In a Facility management system
- Properties

In IFC
- Properties
How it Works

Fire resistance integrity

?? = ??

Fire rating
How it works

310 Infill panel
- Form: [...]
- Edge profile: [...]
- Size (width x length): [...]
- Thickness: [...]
- Face finish: [...]
- Face colour: [...]
- Face pattern: [...]
- Sound absorption coefficient: [...]
- Light reflectance value: [...]
- Thermal conductivity: [...]
- Recycled content: [...]
- Weight: [...]

310 Infill panel
- Plateformat: [...]
- Kantutforming: [...]
- Platestørrelse: [...]
- Tykkelse: [...]
- Overflatebeskaffenhet: [...]
- Farge: [...]
- Overflatemønster: [...]
- Lydabsorpsjonsfaktor: [...]
- Refleksjonsfaktor: [...]
- Varmemotstand: [...]
- Resirkulert innhold: [...]
- Nettovekt: [...]

buildingSMART International home of openBIM
How it works

DATA DICTIONARY

3F2504E0-4F89...

3F2504E0-4F89...
BSDD – What else does it do?

• Accessible via software/internet (cloud)
• Manages synonyms, multiple languages
• Classifies
  – Any classification, as long as it resides in bSDD
• Gets specialization hierarchy
  – Super-types, sub-types
• Get lists of components
• Get lists of properties
• Get lists of relevant standards
• Select from many ‘contexts’
  – (a context is a set of relations)
BSDD - Applications

• No. 1: Access BIM Data Stores
  – Spec database
  – Product information
  – Costing
  – ...

• Translate

• Classify
The Buildingsmart model
The BuildingSMART Model

• IFC:
  – The ‘transport’ medium through which data is transmitted

• IFD:
  – The ‘meaning’ of the data being transmitted

• IDM:
  – The ‘process’ (which part is being sent, what is it, who sent it to whom, and when)
bSDD - Status

• API operational

• Pilot Projects:
  – Approximately 15 participants (at least 10 countries)
  – N.A./Europe: Weekly
  – N.A./Australasia: Weekly
  – Subjects: Ceiling tile, VAV Terminal box
  – Developing content management guidelines
BSDD Status

- **Customers:**
  - CB/NL: Dutch, available to all Dutch users
  - Cobuilder: NO company, storing product data
  - IFD Sign-on (NOBB, ???)

- **Serious Interest**
  - Saint Gobain
  - NBS/RIBA and bsUK (UK)
  - AIMCC (France)
  - University of Austria
Check it out!

• http://bsdd.buildingsmart.org