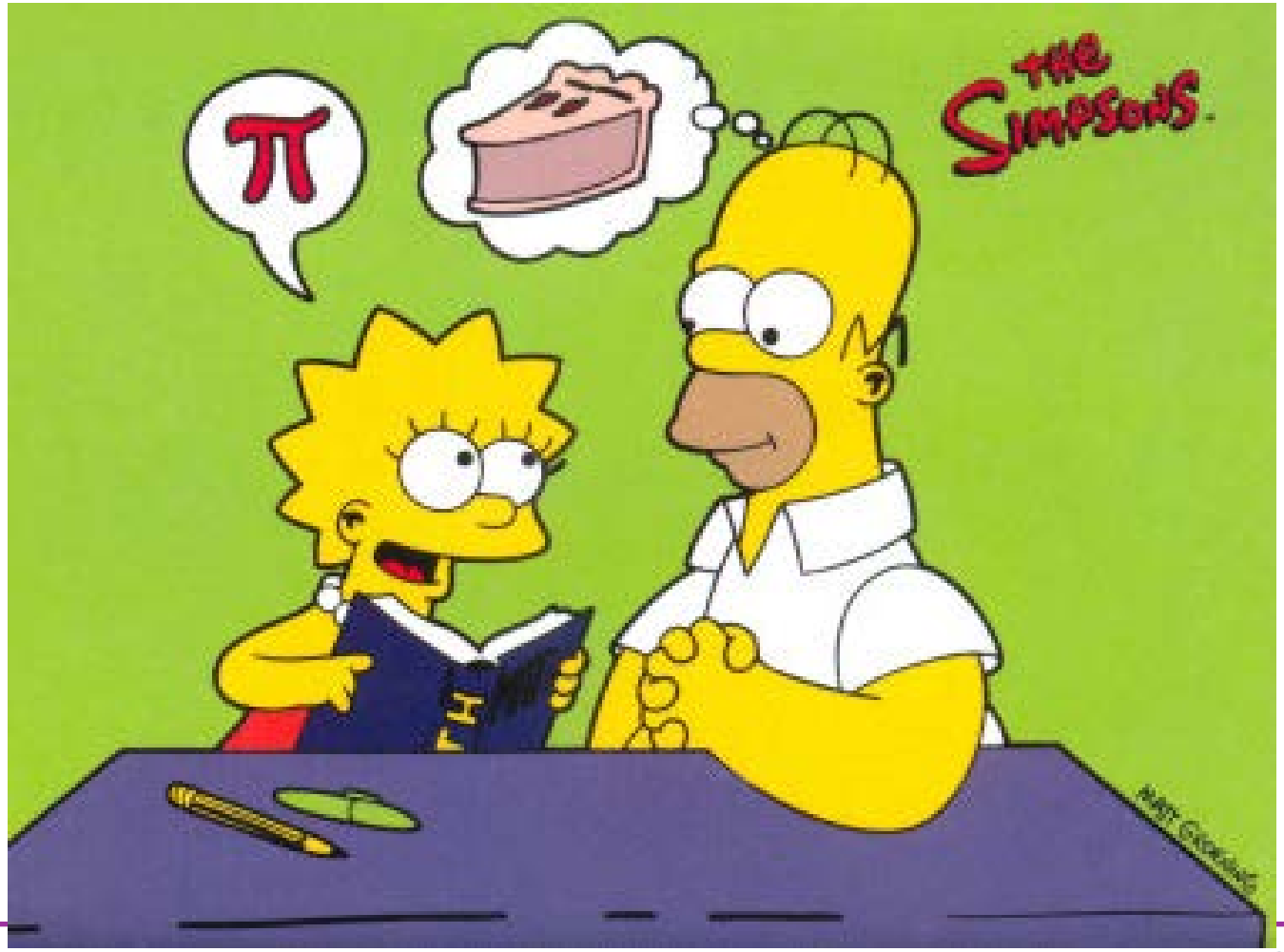
BuildingSMART Data Dictionary (IFD Library, Barbi/Lexicon)

By David Watson, CET, FCSC, CSP

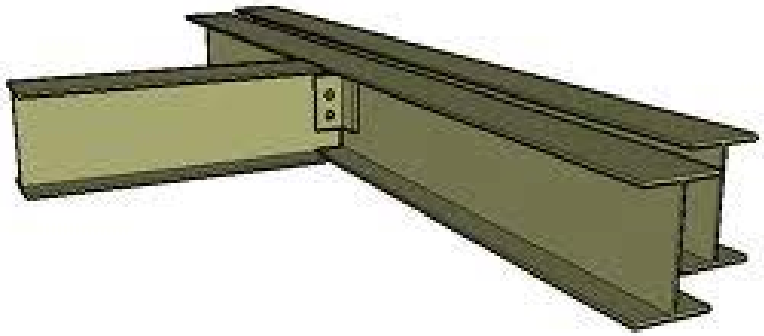
2014-06

CAD-Specs
The fundamental Problem



CAD-SPECS
THE FUNDAMENTAL PROBLEM

BEAM



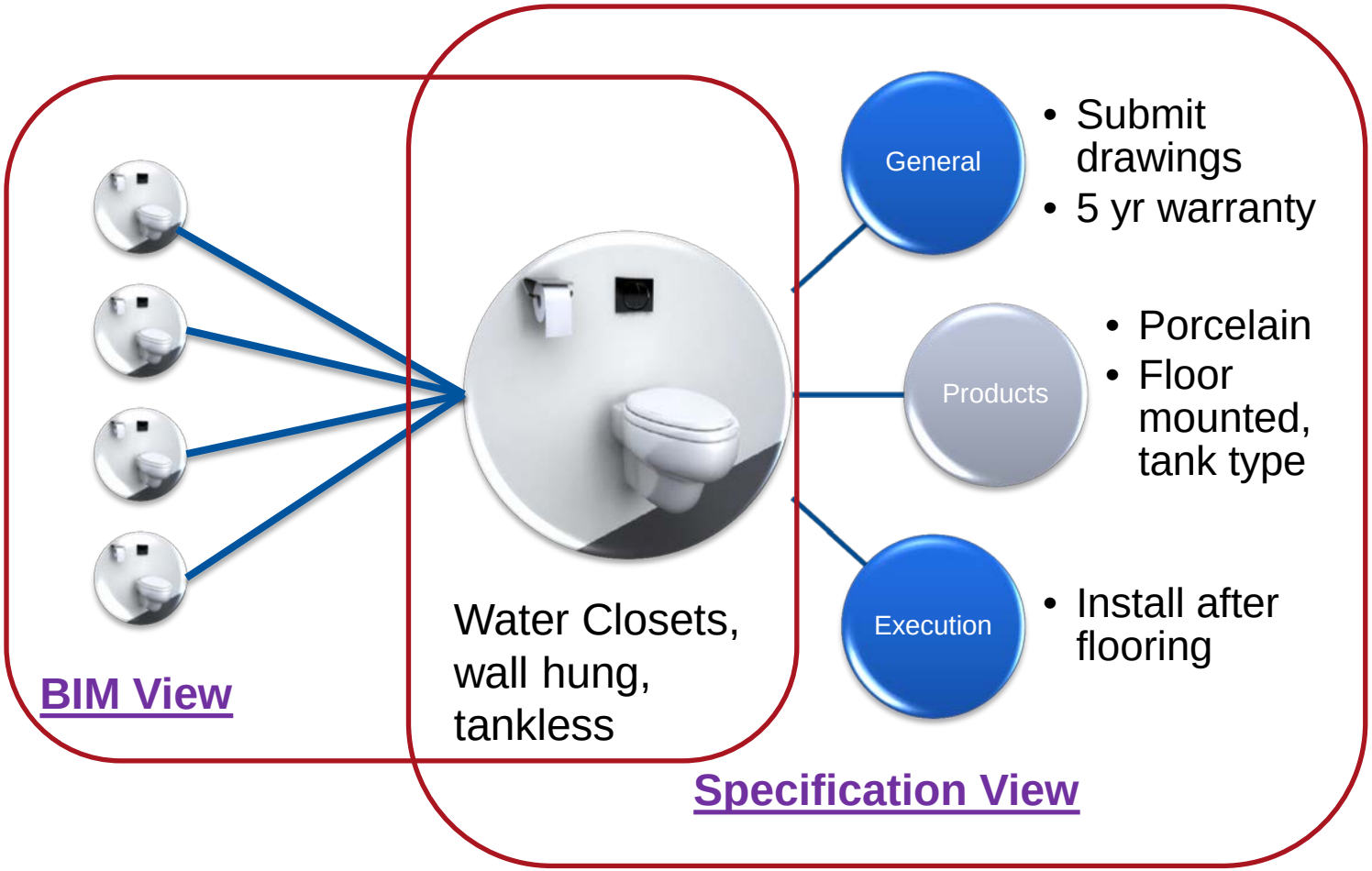
than

Spade

Shovel

Earth relocating implement

objective

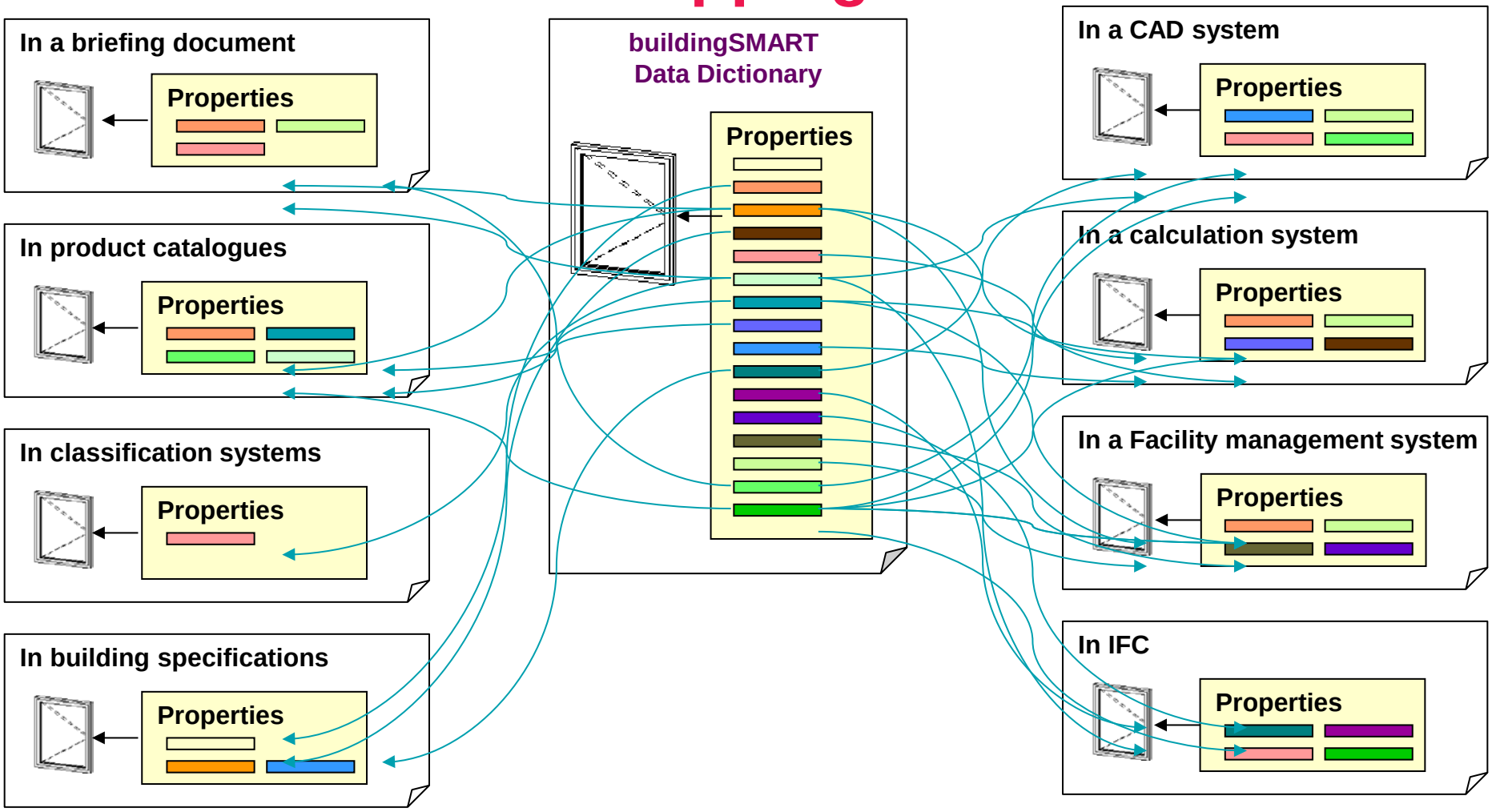

General
Submit drawings
5 yr warranty
Products
Porcelain
Floor mounted, tank type
Execution
Install after flooring
Water Closets, wall hung, tankless
BIM View
Specification View

bSDD – How does it work?

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

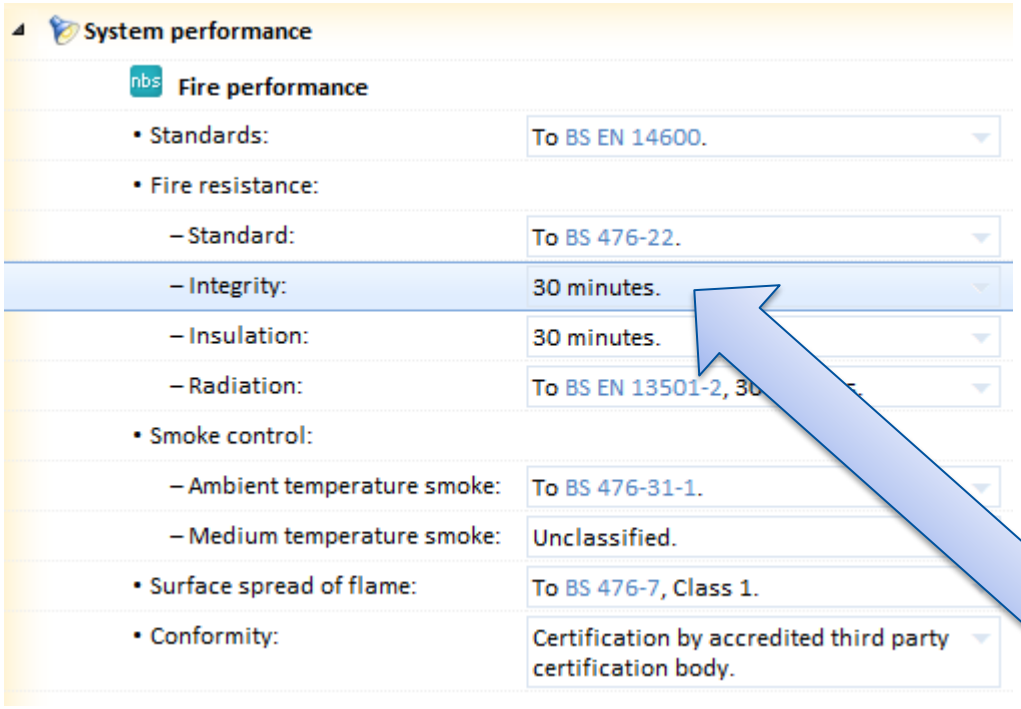
- Data Source (eg. master specification)
  - bSDD GUID = xyz
  - Name = “acoustic panel”
  - STC Rating =
  - Flame spread resistance =
  - Install into suspended t-bar
  - Submit shop drawing

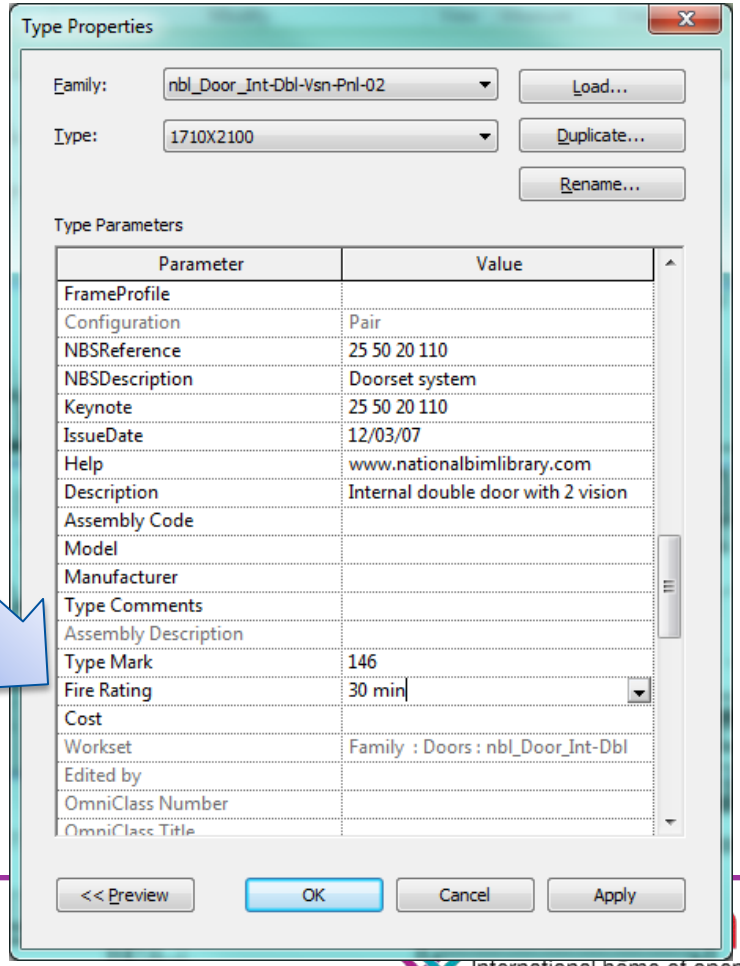
bSDD / IFD mapping mechanism



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: [...]

How it works

3F2504E0-4F89-...

3F2504E0-4F89-...

System performance

Fire performance

• Standards:	To BS EN 14600.
• Fire resistance:	
– Standard:	To BS 476-22.
– Integrity:	30 minutes.
– Insulation:	30 minutes.
– Radiation:	To BS EN 13501-2, 30 minutes.
• Smoke control:	
– Ambient temperature smoke:	To BS 476-31-1.
– Medium temperature smoke:	Unclassified.
• Surface spread of flame:	To BS 476-7, Class 1.
• Conformity:	Certification by accredited third party certification body.

Type Properties

Family: nbl_Door_Int-Dbl-Vsn-Pnl-02 Load...

Type: 1710X2100 Duplicate...

Rename...

Type Parameters

Parameter	Value
FrameProfile	
Configuration	Pair
IBSReference	25 50 20 110
SDescription	Doorset system
te	25 50 20 110
e	12/03/07
H	www.nationalbimlibrary.com
Desc	Internal double door with 2 vision
Assem	
Model	
Manufactu	
Type Comme	
Assembly Descr	
Type Mark	146
Fire Rating	30 min
Cost	
Workset	Family : Doors : nbl_Door_Int-Dbl
Edited by	
OmniClass Number	
OmniClass Title	

<< Preview OK Cancel Apply

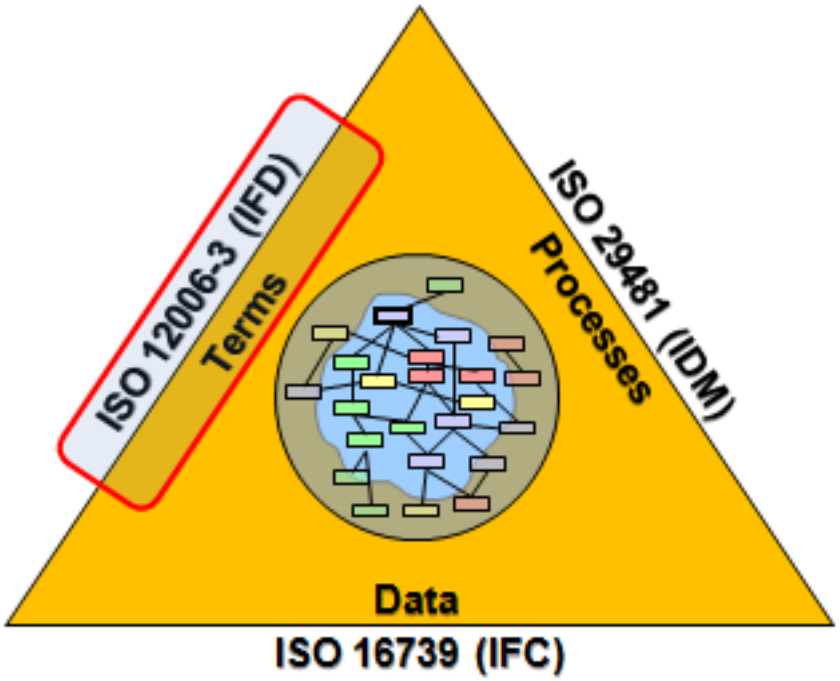
BSDD – What else does it do?

- 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