New BWBRD

Launching June 27 2013, the Netherlands
STABU Foundation

Construction wide Information system
Communication in the construction process
Knowledge disclosed
What is

STABU
What is STABU Foundation

Not-for-profit Foundation promoting unambiguous communication in the construction industry, founded in 1976.
Whence

STABU
Why STABU

- Need for a standard specification system in construction industry
- First version ready in 1986.
- Composition of two remaining systems ready end of 1990.
- Development towards communication standards for entire construction process starting 2005.
Who is STABU
Who is STABU

- Board
  - Sounding board group
  - Circle of supporters
- Management
  - STABU office
  - Project- and working groups
Who is STABU: Board

The board of STABU Foundation is a representation of umbrella organisations in the construction industry.
STABU Board

Government

Architects/Engineers

Building Contractors

Electrical / Mechanical Contractors

Suppliers / Manufacturers

Rijksgebouwendienst
Ministerie van Binnenlandse Zaken en Koninkrijksrelaties

Commando DienstenCentra
Ministrie van Defensie

Vereniging van Nederlandse Gemeenten

vereniging van woningcorporaties

STABU
Who is STABU: Industry

- Board
- Sounding board group
- Circle of supporters

Friends of STABU
- STABU office
- Project- and working groups
Who is STABU: Industry

The sounding board group delivers direct feedback from end users
Who is STABU: Industry

Development of content is done in collaboration with domain experts.
Who is STABU: Office

The STABU office focusses on:
- Development
- Maintenance
- Knowledge transfer
What STABU wants
Mission STABU Foundation

Quality:

- All participants in the Dutch construction process use the STABU products in all stages as the basis for their qualitative information needs and exchange. STABU cooperates with other information suppliers in this area as well as nearby areas such as CAD (drawing) information and costs information.
Mission STABU Foundation

Quantity:
- STABU operates on a non-profit basis, with sales revenue going to maintenance of its products, and reinvestment into new research and development products.

€ = €
Appreciation:

- All STABU users are able to make optimal use of all possibilities that STABU has to offer, knowing that the system is updated with quality documents, law and legislation, new products and skills.

As an employer open to new ideas and developments of its staff members, STABU gives its employees hope for the future, its expectations are clear, and it rewards a job well done.
Why STABU
The hinge of knowledge

Bringing together knowledge and organisations

SBR, BRIS, NEN, SBK, NBD, CROW, CUR, RGD, DVD, IBR, BNA, Bouwend Nederland, Aedes, Uneto-VNI, NvtB, NL-Ingenieurs, .....

Publishing products with integrated knowledge

Standards
- BWBRD Contracts
- BWBRD Work sections
- BWBRD Elements
- BWBRD Spaces

Specifications
- Contract rules
- Functional specifications
- Performance specifications
- Product- and result specifications
- CE Specification

Knowledge products
- BWBRD Knowledge systems
  - Technical help information
  - Knowledge system ‘construction law’
- STABU Standard
The ‘holy grail’ of BIM

Knowledge databases
- Best practice knowledge
- Own practice

Laws and regulations
- Building regulations
- Building specifications

Briefing
- Functional req.
- Estimates
- Conditions
- Requirements

Demolition, refurbishment
- Rebuild
- Demolition
- Restoration

Construction management
- Scheduling
- Logistics, 4D

Facility management
- Letting, sale, operations
- Maintenance
- Guaranties

CAD software
- Drawings, calculations
- Architect, engineer, ...

VRML
- Visualisation, 3D models

Simulations
- Comfort
- Ventilation, heating
- Life cycle cost
- Light, sound
- Insulation
- Fire, usage
- Environment
- Life time predictions

Specifications
- Specification sheets
- Classification standards
- Estimates, accounting

Procurement
- Product databases
- Price databases

IFC + IFD product model

Illustrations: Norwegian Building Research Institute, Olof Granlund, NBLN University of California, Stanford University
STABU supports communication

STABU provides specifications for all stages with which information in a BIM is delivered in a readable form.
Where is STABU
Positioning

Position of STABU as intermediate between international development and implementation in the industry. STABU translates standards to working methods that make regional implementation possible.
Position in the construction process

- STABU-Work Sections is the traditional specification system. This system is used at the end of the design process to create a balanced contract.
- STABU-Element offers possibilities to create a performance oriented specification based on elements. Also a connection to a 3D model on element level is possible.
- STABU-Spaces supports the early design stages (Brief) and maintenance stages (Facility Management) by creating a connection with building types and spaces.
CPR: 1 July 2013

- Construction Products Regulation (EU) No 305/2011 (CPR)
Construction Products Regulation (EU) No 305/2011 (CPR)

- The construction industry is facing the most significant change for a decade in the way in which construction products are sold in Europe. From 1 July 2013, under the Construction Products Regulation 2011 (CPR), it will become mandatory for manufacturers to apply CE marking to any of their products which are covered by a harmonised European standard (hEN) or European Technical Assessment (ETA).
The CPR builds upon the CPD and aims to break down technical barriers to trade in construction products within the European Economic Area (EEA). To achieve this, the CPR provides for four main elements:

1. a system of harmonised technical specifications
2. an agreed system of conformity assessment for each product family
3. a framework of notified bodies
4. CE marking of products.
The CPR harmonises the methods of assessment and test, the means of declaration of product performance and the system of conformity assessment of construction products, but NOT national building regulations. The choice of required values for the particular intended use is left to the regulators and public/privatesector procurers at the national level. However, such required values must be expressed in a consistent manner (technical language) as used in the harmonised technical specifications.
Under the CPR, harmonised technical specifications are harmonised European product standards (hHENs) established by CEN/CENELEC or European Assessment Documents (EAD's) produced by the European Organisation for Technical Approvals (EOTA) as the basis for issuing ETAs for products not covered by hHENs.
The harmonised technical specification for a product defines EEA-wide methods of assessing and declaring all the performance characteristics required by regulations in any Member State which affect the ability of construction products to meet seven basic requirements for construction works.

These cover:

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

- Manufacturer:
- Distributor:
- Intended use:
- **Essential characteristics according EN 13956:2012**
  - External fire performance (EN 13501-5):
  - Reaction to fire (EN 13501-1):
  - Watertightness (EN 1928):
  - Tensile properties (EN 12311-2):
  - Root resistance (EN 13948):
- Resistance to static loading (EN 12730):
- Resistance to impact (EN 12691):
- Tear resistance (EN 12310-2):
- Joint strength (EN 12316-2):
- Durability (EN 1297):
- Foldability (EN 495-5):
- Dangerous substances

**product characteristics**
- Length:
- Width:
- Weight:
- Color:
- .....

This clause correspondent in 1:1 with the declaration of performance delivered by the manufacturer so the product can be inspected on the building site in minutes. All the requirements requested in the specification are mandatory for the manufacturer to deliver in his declaration of performance.
Change of all specifications (1)

- All general product specifications will be based on CE.
- All manufacturer specifications (3800 specs that cover 750,000 products) will be based on the general product specifications.
- My_STABU_system for manufacturers to fill in the values of the properties
Change of all specifications (2)

- All result specs will be fine-tuned on the new (manufacturers) products specs.
- All result specs and product specs will be linked to the new building part specs (based on the Elements table).
- All specifications content will be linked to technical background information (Standards Library, Technical Handbooks, etc.) and to contract information.
Change of all specifications (2)

- All manufacturer specs will be linked with their DoP, Safety sheets, product information, instruction films, CAD drawings, etc.
- This information will be available by QR code
All contracts will be brought together in one system.

- UAV
- UAV-gc
- AVA
- Government contracts
- Social Housing contracts
- Maintenance contracts
- DBFMO contracts
Data Structure

- Unique characteristics and values
- Connectable to all different classifications and workmethods
- Reusable for different purposes
- Linked (2014) with the buildingSMART Data Dictionary.
Finding information

- Better search methods
- Choose products by objective quality criteria
- Search for performance specifications
Manufacturer benefits

Control on his data:
- Content
- Deliverance
- Reuse
- Keep up to date
CE Marking and quality mark

CE is flexible

Essential quality mark
not via private mark

Source: Ministerie van BZK, Bouwkwaliteit
STABU manufacturer specification

- **Spachtelpleister Sublima**
  - Supplier: Strikolith B.V.
  - Distributor:
  - Use: High quality, factory-assembled Sublima spack based on a high dispersion thickener for outside use

- **Product quality consistent EN 15824:2009**
  - Water vapour (EN ISO 7783-2)(Categorie): V2
  - Water intake (EN 1062-3)(Categorie): W3
  - Adhesion (EN 1542)(MPa): 0,4
  - Sustainability (EN 13687-3): NPD
  - Heat emittance (EN 1745)(W/(m · K)): NPD
  - Fire rating (EN 13501-1)(klasse): C.
  - Dangerous substances: see MSDS.

- **Other product qualityies**
  - Grain types and thicknesses (mm): 0,8 \ 1,2 \ 1,6
  - Colour:
  - ......
Summary

- STABU built a database with unique characteristics and values
- Specifications is based on harmonised European Standards
- Fine-tuning to product specifications
- Reusable for different purposes
Summary

- Better search methods
- Update 24/7
- mySTABU offers account profile
- DoP follows technical data
- Control on his data
- Change directly
- Support in communication
History to present

Copying information
Sharing information