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Simplicity Through Standardization
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Dan Rossiter MCIAT
Senior BIM Communicator, BRE

- Chartered Architectural Technologist;
- Co-author of BRE’s BIM education material;
- BSI, B/555 Committee (Terms expert);
- CEN, TC/442 WG1 (Terminology - Convenor);
- ISO, SC13/TF01 (Terminology - Convenor);
- Author of BIMblog.house

Hello!
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UK Construction Week 2018

THE ULTIMATE BIM SUMMIT
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“Simplicity through Standardization.”

Inclusive Assess
BS 8300

Paper sizes
ISO 216

Cup of Tea
BS 6008
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“Simplicity through Standardization.”

<table>
<thead>
<tr>
<th>Geometry</th>
<th>Information</th>
<th>Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS 1192, PAS 1192-2, PAS 1192-3, BS 1192-4, PAS 1192-5, BS 8536-1</td>
<td>ISO 55000 Series (Asset management), BS 7000-4 (Design management), ISO 7200 (Title block data fields), ISO 80000 (Units), ISO 6701 series (Vocabulary).</td>
<td></td>
</tr>
<tr>
<td>BS 5606 (Tolerance)</td>
<td>BS 8541-1 (Object naming)</td>
<td>ISO 128-20 (Lines)</td>
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<td>ISO 5457 (Drawing border)</td>
<td>BS 8541-2 (Symbols)</td>
</tr>
</tbody>
</table>
Geometry (BS 5606):

Problem: Old buildings are wonky.

| Height up to 3 m | ± 26 |
| Thickness        | ± 20 |
| Straightness in 5 m | ± 5 |
| Abrupt changes in a continuous surface | — |
| Verticality up to 2 m | 9 |
| up to 3 m         | 10 |
| up to 7 m         | 14^b |
| Level of bed joints | ± 11 |
Problem: How detailed do I model?

Dan Rossiter @DRossiter87 · 7 May 2016
Hey, Monday’s blog is written; so let’s have a quick poll. What Level of Model Detail should I make my Rabbit Cage?

- 29% LOD 2
- 21% LOD 3
- 21% LOD 4
- 29% LOD 5

Final results
Problem: How detailed should I model my objects?

- Schematic Level of Detail (1min / 280KB)
- Coordinating Level of Detail (5min / 340KB)
- Visualization Level of Detail (20min / 1104KB)
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Information (BS 8541-1):

Problem: What do I call my objects?

Objects should be uniquely named. Names should use A-Z, 0-9 and _underscore.

Object: Source_Type_SubType

Object: Nest_Alarm_NestProtect BBH_Door_FrontDoor
Problem: What do I call everything else?

### Levels
- Sequence: 01, 02, 03

### Spaces
- Level: 101, 102, 103

### Types
- Type Name: SinkType01, ShelfType02

### Component
- Type: Window01, Boiler01

<table>
<thead>
<tr>
<th>Name</th>
<th>Space</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door01</td>
<td>001</td>
<td>DoorType01</td>
</tr>
<tr>
<td>Door02</td>
<td>002</td>
<td>DoorType02</td>
</tr>
<tr>
<td>Door03</td>
<td>003</td>
<td>DoorType02</td>
</tr>
<tr>
<td>Door04</td>
<td>004</td>
<td>DoorType03</td>
</tr>
<tr>
<td>Door05</td>
<td>005</td>
<td>DoorType04</td>
</tr>
</tbody>
</table>
Information (BS 8541-4 & ISO 82045-1):

Problem: What do I call properties and attributes?

Attributes should be in CamelCase and indicate the data type expected.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape</td>
<td>Cylindrical</td>
</tr>
<tr>
<td>Size</td>
<td>Dia 77mm</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Finish</td>
<td>n/a</td>
</tr>
<tr>
<td>Grade</td>
<td>n/a</td>
</tr>
<tr>
<td>Material</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>InstallationDate</td>
<td>2016-08-06T12:00:00</td>
</tr>
<tr>
<td>WarrantyStartDate</td>
<td>2016-08-06T12:00:00</td>
</tr>
<tr>
<td>TagNumber</td>
<td>n/a</td>
</tr>
<tr>
<td>AssetIdentifier</td>
<td>n/a</td>
</tr>
<tr>
<td>ReplacementCost</td>
<td>199</td>
</tr>
<tr>
<td>AssessmentCondition</td>
<td>Good</td>
</tr>
<tr>
<td>AssessmentDate</td>
<td>2016-08-06T12:00:00</td>
</tr>
<tr>
<td>AssessmentDescription</td>
<td>No faults identified</td>
</tr>
</tbody>
</table>
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Records (ISO 128-20):

*Problem: What lines should I use?*

Line widths should be based on a common ratio of 1:1.4
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Records (ISO 3098 Series):

*Problem:* What font should you use?

*Quiz:* How many Ts can you see?

I41VlWTpElvIG  (Arial)
I41VlWTpElvIG  (Calibri)
I41VlWTpElvIG  (Simplex)
I41VlWTpElvIG  (Comic Sans)
I41VlWTpElvIG  (ISOCPEUR)

The quick BIM fox jumps over the uncoordinated dog
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Records (ISO 7200):

**Problem: What title block should I use?**

The total width of a title block should be 180mm to fit an A4 sheet. The same title block should be used for all paper sizes.

<table>
<thead>
<tr>
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<tr>
<td>Technical Drawing</td>
<td>Ty Crempog Asset Capture</td>
<td>Existing Ground and First Floor Plans</td>
<td>7001-BBH-ZZ-ZZ-DR-A-00101</td>
</tr>
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</table>

[www.BIMblog.house](http://www.BIMblog.house)
Records (ISO 5457):

Problem: What drawing border should I use?

Drawing borders shall include:
- Title block (ISO 7200);
- Border and Frame (20x10x10x10mm);
- Centring marks;
- Grid reference system (Incl. Paper size); and
- Trimming marks.
Records (BS 8541-2):

*Problem: What symbols should I use?*

*Quiz: Which is the ‘official’ North Point?*
“Simplicity through Standardization.”

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Information Production Guidance

Coming soon...

**BRE**, in collaboration with the professional institutions and open industry consultation are producing a series of publications on how to produce clear and consistent information based on BRE’s own digital estate.
Information Production Guidance

BRE

Draft Publication -> Finalise

Internal Review

Open Forum

Building a better world together [digitally]
Thank you

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