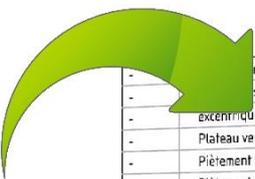


TopSolid'Wood

Wood Codification using



-	rectangulaire	TB-RFC	1	-	-	-	-	-
-	asse 30x8	-	24	hêtre	hêtre	-	-	-
-	excentrique minifix filet bois ep 19	-	18	acier	-	-	-	-
-	Plateau verre	PI	1	Glass-01	-	1000.0	1000.0	10.0
-	Piètement 6	P6	1	panneau de particules	MFI-0T-03	440.0	333.3	19.0
-	Piètement 5	P5	1	panneau de particules	MFI-0T-03	440.0	333.3	19.0
-	Piètement 4	P4	1	panneau de particules	MFI-0T-03	440.0	295.3	19.0
-	Piètement 3	P3	1	panneau de particules	MFI-0T-03	440.0	295.3	19.0
-	Piètement 2	P2	1	MFI-WD-26	-	466.7	440.0	19.0
-	Piètement 1	P1	1	MFI-WD-26	-	466.7	440.0	19.0
-	TV-Flat-Screen	-	1	chrome	-	-	-	-
-	Safo milano	-	1	-	-	-	-	-
-	Porte panneau verre	PPVE	1	-	-	-	-	-
-	Verre	VF	1	Glass-01	-	1015.0	523.0	5.0
-	Traverse haute	TH	1	hêtre	blanc brillant	591.0	150.2	20.0
-	Traverse basse	TB	1	hêtre	blanc brillant	591.0	80.0	20.0
-	Poignée fil	P0-FIL	1	aluminium	-	-	-	-

© 2016, Missler Software
7 Rue du Bois Sauvage
F-91055 Evry, France
Web: <http://www.topsolid.com>
E-mail: info@topsolid.com
All rights reserved.

The information contained herein may be changed without prior notice.
No material may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose without the express written permission of Missler Software.

TopSolid® is a registered trademark of Missler Software.

TopSolid® is a product name of Missler Software.

The information and the software discussed in this document are subject to change without notice and should not be considered commitments by Missler Software.

The software discussed in this document is furnished under a license and may be used or copied only in accordance with the terms of this license.

Version 6.16 Rev. 03

Contents

Contents	iii
Introduction	1
Using	1
Properties list usable in the Wood Codification	2
Simple properties	2
Specifics properties	2
Dimensions properties	3
Special using	4
Apply the wood codification only to a part type	4
Don't apply the Wood codification to specifics part type	4
Display text in upper case or lowercase	4
Modify the separator symbol	5
Rule the number of characters displayed	5
Display the part's set properties or the project's set properties.....	6
Trim the property's character number	7
Use a mapping table on a property	8
To create the mapping table	8
To apply the mapping in a Wood Codification	8
Wood codification for specific file name	9
Cam files names	9
DFT file name in multi-drawing.....	9
Display additional information in the wood selection windows	10
Customize the displayed text on the nested parts	11
Examples	12
Notes	13

Introduction

The function Wood Codification allows concatenating in one bill of material column several parts' properties.

Using

- Edit with a text editor a BOM file previously created.

Remark: The BOM files are saved in format **.bom** in the folder **Config\Template** or **Group\Template**.

- In the column where the properties will be concatenated, write after the **DEF** the **Wood Codification** like the following example:

```
NAME=LEVEL
"DEF=<WOO_CODIFICATION|...>"
TYPE=INTEGER
ALIGN=LEFT
TITLE_ALIGN=LEFT
WIDTH=0.015
VISIBLE=YES
;
```

- The properties whose will be concatenate to generate the wood codification have to be written in between the **|** and the **>**.
- Each property write in the wood codification have to be between two **\$**.

Example:

```
"DEF=<WOO_CODIFICATION|$DESIGNATION$$REFERENCE$>"
```

Explain: In this case, the column will display the part designation and the part reference.

Result: If the part's designation is **Right side** and the part's reference is **RS**, the result will be: **Right sideRS**

- It's possible to add basic texts between each property. For this, simply write it in the wood codification.

Example: (the basic text is in red):

```
"DEF=<WOO_CODIFICATION|Name:$DESIGNATION$ - Ref:$REFERENCE$>"
```

Result: Name:Right Side – Ref:RS

Properties list usable in the Wood Codification

Simple properties

- **TopSolid Design** file name (with the file extension .top): **DOCUMENT_NAME**
- Part's designation: **DESIGNATION**
- Part's reference: **REFERENCE**
- Part's type: **TYPE**
- Part's supplier: **SUPPLIER**
- Part's index: **INDEX**
- Part's first 3D index: **INDEX_3D**
- Part's second 3D index: **INDEX_3D_2**
- Part's identifier (@): **ELEMENT_IDENTIFIER**
- Part's matter: **MATTER**
- Part's matter reference: **MATTER_REFERENCE**
- Part's coating: **COATING**
- If the part is an edge or a laminate, his codification: **WOO_EDGE_OR_LAMINATE_CODIFICATION**
- If the part is a panel, the support's matter: **WOO_PANEL_MATTER**
- If the part is a panel, the support's matter reference: **WOO_PANEL_MATTER_REFERENCE**
- Working station's names define in the **Machining** tab :
 - First positioning : **WOO_FIRST_WORK_STATION**
 - Second positioning : **WOO_SECOND_WORK_STATION**
- Part's quantity: **TOTAL_COUNT**
- Valorization reference : **VALORISATION_REFERENCE**
- If the component use code, his code: **COMPO_CODE**
- Part's over length repartition mode (on X): **PART_OFFSET_X**
- Part's over width repartition mode (on Y): **PART_OFFSET_Y**
 - **0 : Positive side**
 - **1 : Negative side**
 - **2 : Centered**

Remark : Using part's over dimensions repartition mode properties in the **Wood codification** requires to make the stock.

Specifics properties

The text in red has to be replaced by the element name.

- User information in the part's document:
\$DGI|Name:[DGI name]\$
- Part's property:
\$PROP|Name:[Propertie name]|Field:[Field number]\$

Remark: The first field define in the property is the number **0**.

- Component's parameter:
\$COMPO_PARAM|Name:[Parameter name]\$
- Named text in the component:
\$COMPO_TEXT|Name:[Text name]\$

Dimensions properties

It's possible, for the dimensions properties, to display the value in a specific format by ruling the unit, the number of digits after the decimal point and the separator symbol.

- Write in the wood codification the property followed by: **|Unit:4|Prec:2**
 - **Unit:** corresponds to the unite use to display the value.
 - **Unit:0** : meter
 - **Unit:4** : millimeter
 - **Unit:5** : centimeter
 - **Unit:6** : decimeter
 - **Unit:7** : decameter
 - **Unit:8** : hectometer
 - **Unit:9** : kilometer
 - **Unit:11** : mil
 - **Unit:12** : inch
 - **Unit:13** : foot
 - **Unit:14** : yard
 - **Unit:14** : mile
 - **Prec:** corresponds to the number of digits after the decimal point.

Example: <WOO_CODIFICATION|\$PART_THICKNESS|Unit:4|Prec:2>

Explain: In this case, the column will display the part's thickness in millimeters with 2 digits after the decimal point.

Result: If the part's thickness = **15.2mm**, the result will be: **15.20mm**.

- Usable properties list:
 - Part's finish length: PART_LENGTH
 - Part's finish width: PART_WIDTH
 - Part's finish thickness: PART_THICKNESS
 - Part's rough length: PART_ROUGH_LENGTH
 - Part's rough width: PART_ROUGH_WIDTH
 - Part's rough thickness: PART_ROUGH_THICKNESS
 - Part's length oversize: PART_OVER_LENGTH
 - Part's width oversize: PART_OVER_WIDTH
 - Part's thickness oversize: PART_OVER_THICKNESS

Special using

Apply the wood codification only to a part type

It's possible to apply the wood codification only to a part type.

- Write at the end of the wood codification end: **TYPE(Part type)**

Example: <WOO_CODIFICATION|WOO_PANEL_MATTER-\$PART_THICKNESS|Unit:4|Prec:0\$TYPE(Panel)>

Explain: In this case, the wood codification will be applied only on the part whose have the type **Panel**.

Result: If the panel support's matter is **particule board**, his thickness = **19mm** and his part type contain **Panel**, the result will be: **particule board-19**.

Don't apply the Wood codification to specific part type

It's possible to apply the **Wood codification** to all the parts excluding some specific part types.

- Write at the end of the **Wood codification**: **EXCEPT_TYPE(type1,type2,type3)**

Example:

<WOO_CODIFICATION|\$WOO_PANEL_MATTER\$_\$PART_THICKNESS\$EXCEPT_TYPE(Hardware,Decoration)>

Explication: In this case, the **Wood codification** will be applied to all the parts except those having the type **Hardware** or **Decoration**.

Top	entité panneau	W1000_ST9_0.019
Right side	entité panneau	W1000_ST9_0.019
Left side	entité panneau	W1000_ST9_0.019
Bottom	entité panneau	W1000_ST9_0.019
Striated pin 8x30	Hardware	-
Hettich twister 11,5 - 30	Hardware	-
Hettich rastex 15 TH19	Hardware	-
DECO foot	Hardware	-
Plant	Decoration	-
Hat	Decoration	-
DESIGNATION	TYPE	MATERIAL

Display text in upper case or lowercase

It's possible to display a property in the wood codification in uppercase or in lowercase.

- Add after the property name **|Upper** or **|Lower**.

Example: <WOO_CODIFICATION|\$DESIGNATION|Upper\$-\$REFERENCE|Lower\$>

Explain: In this case, the wood codification will display the part's designation in uppercase and the part's reference in lowercase.

Result: If the part's designation is **Right side** and the part's reference is **RS**, the result will be: **RIGHT SIDE-rs**.

Modify the separator symbol

For the dimensions properties, it is possible to change the separator symbol (by default .).

- For this, write after the dimension property: **|Comma:-**
Comma: corresponds to the separator symbol.

Example: <WOO_CODIFICATION|\$PART_THICKNESS|Unit:4|Prec:2|Comma:-\$>

Explain: In this case, the column will display the part's thickness and the decimal separator will be a -.

Result: If the part's thickness = **15.2mm**, the result will be: **15-20mm**.

Rule the number of characters displayed

For the dimensions properties, it is possible to rule the number of characters displayed (number of digits before the decimal point + number of digits after the decimal point + separator).

Note: If the number of characters to display is higher than the digit number, no character is deleted and the true number of characters is displayed.

- Write after the dimension property: **|DigitNumber:6**

Example: <WOO_CODIFICATION|\$PART_THICKNESS|Unit:4|Prec:2|Comma:,|DigitNumber:6\$>

Result: If the part's thickness = **5.2mm**, the column will display: **005,20**

If the part's thickness = **1050.2mm**, the column will display: **1050,20**

Display the part's set properties or the project's set properties

It's possible to modify a property inside the **Wood codification** to display the property of an assembly which contain the part.

- Write after the property: **|OWNER_type**

Note: For further information about the available OWNER, see the documentation **Direct - Root owner**.

Example of a part:

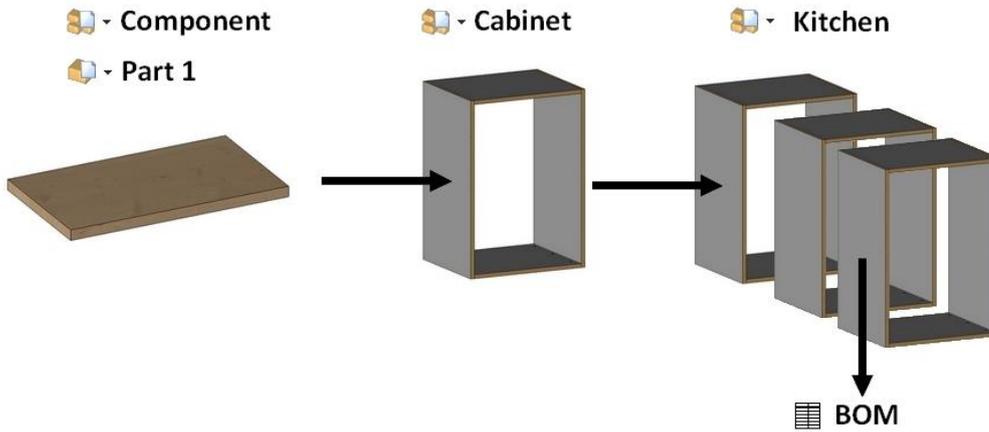
- **Designation** : Part 1
- **Part's assembly designation** : Component

This assembly is insert inside a first assembly:

- **First set designation:** Cabinet

This assembly is then included inside a second assembly:

- **Second set designation** : Kitchen



If a BOM of the part if displayed in the assembly **Kitchen**:

Wood codification	Explanations	Result
<WOO_CODIFICATION \$DESIGNATION OWNER_1 \$>	Display the first part's assembly designation.	Component
<WOO_CODIFICATION \$DESIGNATION OWNER_2 \$>	Display the second part's assembly designation.	Cabinet
<WOO_CODIFICATION \$DESIGNATION OWNER_PRJ \$>	Display the final part's assembly designation.	Kitchen

Trim the property's character number

It's possible to rule the characters number display in the **Wood Codification** by trimming the characters number of each property.

If the character number is longer than the rule, the property is trimmed.

If the character number is shorter than the rule, it's possible to define an *adding character* to obtain the right ruled characters number.

- Write after the property : **|Trim(i,j,X,E)**
 - **i**: First character number to keep. If this number is negative, the character trimming start from the end.
 - **j**: Character number to keep.
 - **X**: Adding character if the property if shorter than **j**.
 - **E** : Position of the adding characters :
 - **E** (end): the adding characters are placed after the property.
 - **S** (start): the adding characters are placed before the property.

Example of a part with:

- **Designation**: LEFTSIDE
- **Reference** : LSI

Wood codification	Explanation	Result
<WOO_CODIFICATION \$DESIGNATION Trim(1,4,X,E)\$ >	The column will display the 4 first designation characters. If its number is shorter than 4, the character X will be added at the end.	LEFT
<WOO_CODIFICATION \$DESIGNATION Trim(-1,4,X,E)\$ >	The column will display the 4 last designation characters. If its number is shorter than 4, the character X will be added at the end.	SIDE
<WOO_CODIFICATION \$REFERENCE Trim(1,4,X,S)\$ >	The column will display the 4 first reference characters. If its number is shorter than 4, the character X will be added at the start.	XLSI
<WOO_CODIFICATION \$REFERENCE Trim(1,4,X,E)\$ >	The column will display the 4 first reference characters. If its number is shorter than 4, the character X will be added at the end.	LSIX

Use a mapping table on a property

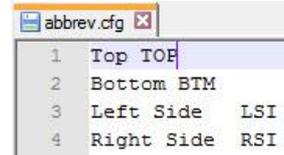
Use a mapping table on a property allows replacing the text displayed by another by a mapping table. If the starting text is not in the mapping table, it will be not replaced.

To create the mapping table

- Create a file **abbrev.cfg** in the folder **Config** or **Group**.

Remark: If two mapping table are created in the folder **Config** and **Group**, they will be concatenated.

- Edit this file with a text editor.
- Write on each line a mapping using the model
StartingValue (tabulation) ReplacementValue



To apply the mapping in a Wood Codification

- Write after the property: **|Abbrev**

Example of a part with:

- **Designation** : Bottom

Wood codification	Explanation	Result
<WOO_CODIFICATION \$DESIGNATION Abbrev >	The function will see if a mapping exist for these designation in the file abbrev.cfg	BTM

Wood codification for specific file name

Cam files names

It's possible to manage the cams files names (TopSolid'Wood Cam or machining exports) exported.

- Create a bill of material with your wood codification for the cam file name.
- Replace **WOO_CODIFICATION** by **WOO_CAM_FILE_NAME**.

Note: In the case or 2 cams files are generated, it is possible to manage the second cam file name with a second wood codification with using **WOO_CAM_FILE_NAME2**.

- Save the bill of material.
- Since a design document, open the options with **Tools > Options**.
- Open the section **TopSolid'Wood Configuration > Files > Parts selection sorting**.
- Double-click on the interface use (for example **TopSolid'WoodCam** or **WoodWop**).
- Load the BOM file previously created with the **WOO_CAM_FILE_NAME**.
- Validate the file with **OK** and validate the options with **OK**.

So when the machining export will be realized, the cams files names will be formatted like the **WOO_CAM_FILE_NAME** for the first machining file and like the **WOO_CAM_FILE_NAME2** for the second machining file.

DFT file name in multi-drawing

It's possible to manage the DFT files names generated by a **Multi-drawing**.

- For this, create a bill of material with your **Wood codification** for the DFT file name.
- Replace **WOO_CODIFICATION** by **WOO_DFT_FILE_NAME**.
- Save the bill of material.
- Since a design document, open the options with **Tools > Options**.
- Open the section **TopSolid'Wood Configuration > Files > Parts selection sorting**.
- Double-click on the line **Multi drawings**.
- Load the BOM file previously created with the **WOO_DFT_FILE_NAME**.
- Validate the file with **OK** and validate the options with **OK**.

So when the multi-drawing will be realized, the DFT files names will be formatted like the **WOO_DFT_FILE_NAME**.

Note: The name of each DFT file name is not managed if all the drafts are put in one document.

Display additional information in the wood selection windows

It is possible, in the wood selection windows (like the **Matter configuration** or the **Ardis export**), to display more information.

By default, only the part's designation is display.

- For this, create a bill of material with your wood codification with all the information to display.
- Replace **WOO_CODIFICATION** by **WOO_TREE_IDENTIFICATION**.
- Save the bill of material.
- Since a design document, open the options with **Tools > Options**.
- Open the section **TopSolid'Wood Configuration > Files > Parts selection sorting**.
- Double-click on the configurator's line to modify.
- Load the BOM file previously created with the **WOO_TREE_IDENTIFICATION**.
- Validate the file with **OK** and validate the options with **OK**.

So when the part selection box is used, all the information in the **WOO_TREE_IDENTIFICATION** will be displaying.

Example:

- The bellow bill of material is created:

```

COLUMNS {
    NAME=TREE_IDENTIFICATION
    "DEF=<WOO_TREE_IDENTIFICATION|SDESIGNATIONS$-$REFERENCE$-$ELEMENT_IDENTIFIER$>"
    TYPE=STRING
    ALIGN=LEFT
    TITLE_ALIGN=LEFT
    WIDTH=0.015
    VISIBLE=YES
    ;
}
GROUP_BY {
    TREE_IDENTIFICATION
}
ORDER_BY {
    TREE_IDENTIFICATION
}

```

- This bill of material is used for the **Matters configurator**.



- So when the **Matters configurator** is used, the information added in the **WOO_TREE_IDENTIFICATION** are displayed.



Customize the displayed text on the nested parts

It's possible, in a nesting, to customize the information displayed on the parts.

By default, only the part's designation is displayed or its identifier if it does not have a designation.

- For this, create a bill of material with your wood codification with all the information to display.
- Replace **WOO_CODIFICATION** by **WOO_NESTING_IDENTIFICATION**.
- Save the bill of material.
- Since a design document, open the options with **Tools > Options**.
- Open the section **TopSolid'Wood Configuration > Files > Parts selection sorting**.
- Double-click on the **Automatic nesting** line.
- Load the BOM file previously created with the **WOO_NESTING_IDENTIFICATION**.
- Validate the file with **OK** and validate the options with **OK**.

With this, when making a nesting, all the information of the **WOO_NESTING_IDENTIFICATION** will be displayed.

Example:

- The bellow bill of material is created:

```

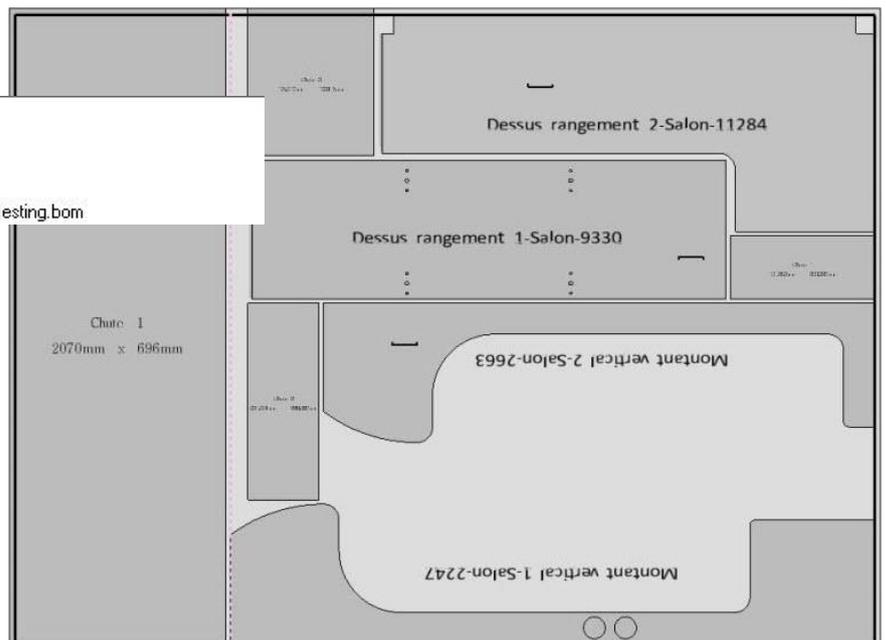
COLUMNS {
    NAME=NEST_IDENTIFICATION
    "DEF=<WOO_NESTING_IDENTIFICATION|$DESIGNATION$-DESIGNATION|OWNER_PRJ$-
$ELEMENT_IDENTIFIERS>"
    TYPE=STRING
    ALIGN=LEFT
    TITLE_ALIGN=LEFT
    WIDTH=0.015
    VISIBLE=YES
    ;
}
GROUP_BY {
    NEST_IDENTIFICATION
}
ORDER_BY {
    NEST_IDENTIFICATION
}

```

- This BOM is used for the **Automatic nesting**.



- With this, in a nesting, the information added in the **WOO_NESTING_IDENTIFICATION** are displayed.



Examples

A part in a project has these properties:

- Designation : RightSide
- Reference : RS
- Type : Panel
- Supplier : InterWood
- BOM index : R5
- Identifier : @154
- Matter : Particule board
- Coating : Nothing
- Finish length : 5000 mm
- Finish width: 200 mm
- Rough length : 5010 mm
- Rough width : 205 mm
- The part has a property "Production" with a field "Assembly site" at the value: "Toulouse".
- The document has a DGI "JOB_NAME" at the value : REF154
- The part is belongs to a component "**Cabinet**"

Wood codification	Result
DEF=<WOO_CODIFICATION \$DESIGNATION\$-\$REFERENCE\$>	RightSide-RS
DEF=<WOO_CODIFICATION \$TYPE Upper\$-ref-\$REFERENCE Lower\$>	PANEL-ref-rs
DEF=<WOO_CODIFICATION \$ELEMENT_IDENTIFIERS \$COATING\$-\$MATTER\$>	154 -Particule board
DEF=<WOO_CODIFICATION ASM:\$PROP Name:Production Field:Assembly site \$>	ASM:Toulouse
DEF=<WOO_CODIFICATION Job:\$DGI Name:JOB_NAME\$>	Job:REF154
DEF=<WOO_CODIFICATION \$PART_LENGTH Unit:4 Prec:0\$>	5000
DEF=<WOO_CODIFICATION \$PART_WIDTH Unit:4 Prec:2 Comma:-\$ >	200-00
DEF=<WOO_CODIFICATION \$INDEX\$-\$PART_ROUGH_LENGTH Unit:4 Prec:0 DigitNumber:5\$>	R5-05010
DEF=<WOO_CODIFICATION \$SUPPLIER\$-\$PART_OVER_WIDTH Unit:4 Prec:1 Comma:,\$>	InterWood-5,0

Notes

A series of horizontal dotted lines for taking notes.

A series of horizontal dotted lines for taking notes.