

## **ARCHICAD WORKFLOW**

Setting up NATSPEC Keynoting for ARCHICAD users

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**Document Quality Control**

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**Project:** NATSPEC Keynoting for ARCHICAD users

**File name** NAT-FTD-XX-XX-RP-N-0001

**Description:** Custom solution to enable NATPSEC Keynoting work for ARCHICAD users

**Client:** NATSPEC

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This document has been prepared by

**Fulton Trotter and Partners Architects Pty Ltd** trading as

Fulton Trotter Architects

18 Portman Lane, Spring Hill QLD 4000

PO Box 353, Spring Hill QLD 4004

T 07 3291 1511

F 07 3291 1500

brisbane@fultontrotter.com.au

**www.fultontrotter.com.au**

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Rev	Date	Revision Details/Status	Prepared by	Author	Verifier	Approver
P01	26/04/2019	Draft for Review	NH	NH	NH	NH
P02	10/06/2019	Issue for Approval	NH	NH	NH	NH
P03	18/06/2019	Final Issue	NH	NH	NH	NH
<b>Current Revision</b>		P03				

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**Approval**

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**Author Signature**



**Approver Signature**



**Name**

Nathan Hildebrandt

**Name**

Nathan Hildebrandt

**Title**

Director

**Title**

Director

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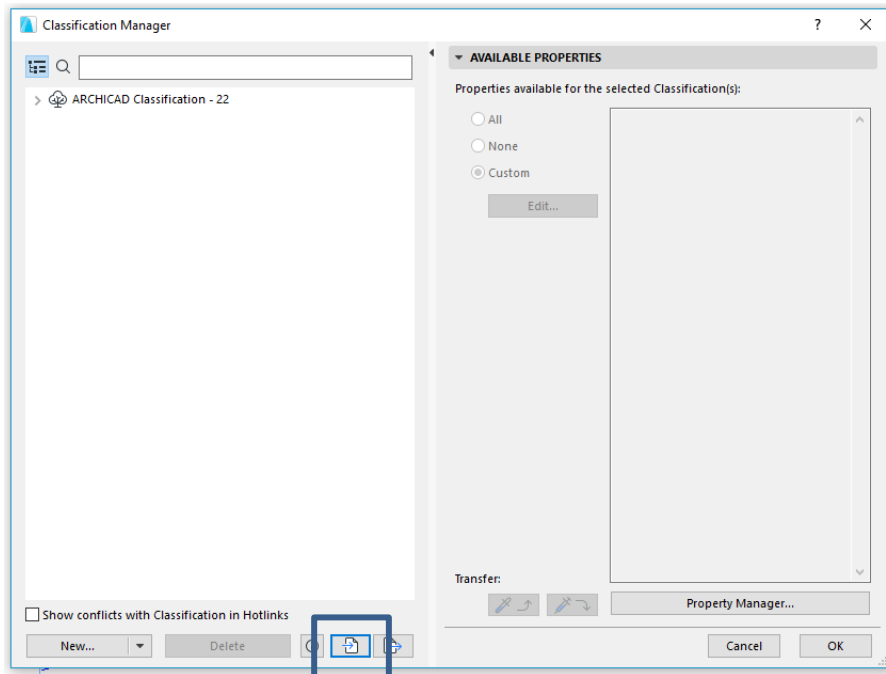


This process has been documented using ARCHICAD 22 INT version. It will require users to undertake a few steps to implement, this implementation should be incorporated into users' templates so that these steps do not need to be undertaken again. Note that this process is not endorsed by GRAPHISOFT or any of its resellers. It is a suggested approach by the author. The author doesn't warrant the process for its accurateness or reliability, and accepts no liability for those using part or all of the nominated process outlined below.

1. Download the NATSPEC classification XML file from the GRAPHISOFT website.  
[https://www.graphisoft.com/downloads/archicad/BIM\\_Data.html](https://www.graphisoft.com/downloads/archicad/BIM_Data.html)

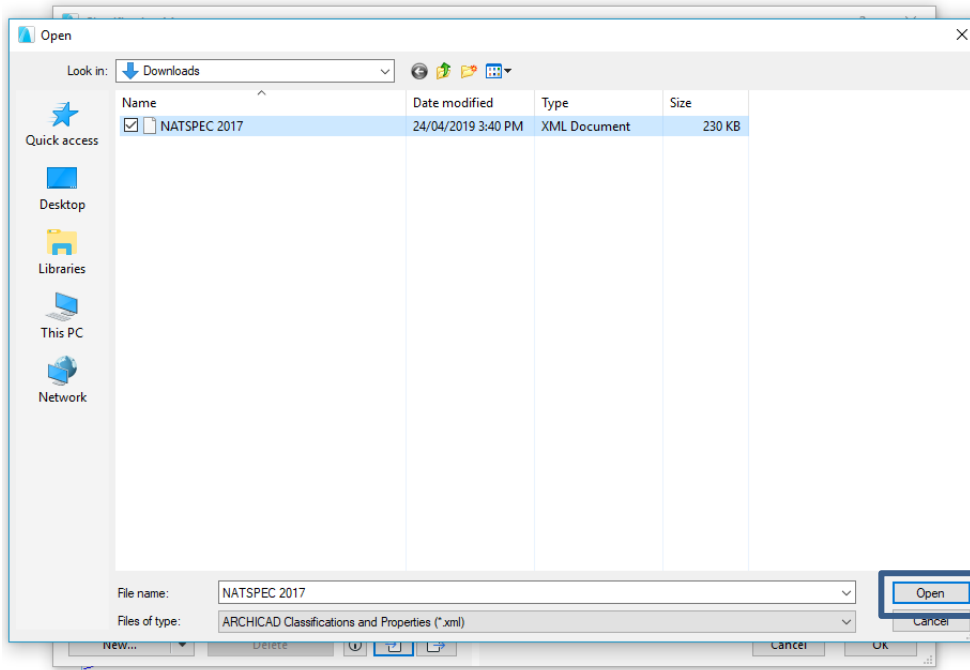
<b>ASTM UniFormat II</b>	XML	E1557	Construction project management using AS...	/ English	18.09.18
<b>2010 CSI UniFormat</b>	XML	2010	UniFormat™ 2010 edition is a common elenta...	/ English	12.09.18
<b>NATSPEC</b>	XML	2017	NATSPEC is the Australian National Master Sp...	/ English	05.04.18
<b>CCS (DK)</b>	XML	April 2017	CCS provides the building and civil engineer...	/ Danish	29.06.17

2. Open ARCHICAD 22 with your current ARCHICAD Template file.
3. Open Menu>Options>Classification Manager...
4. In the Classification Manager dialogue click on the Import button as shown below.

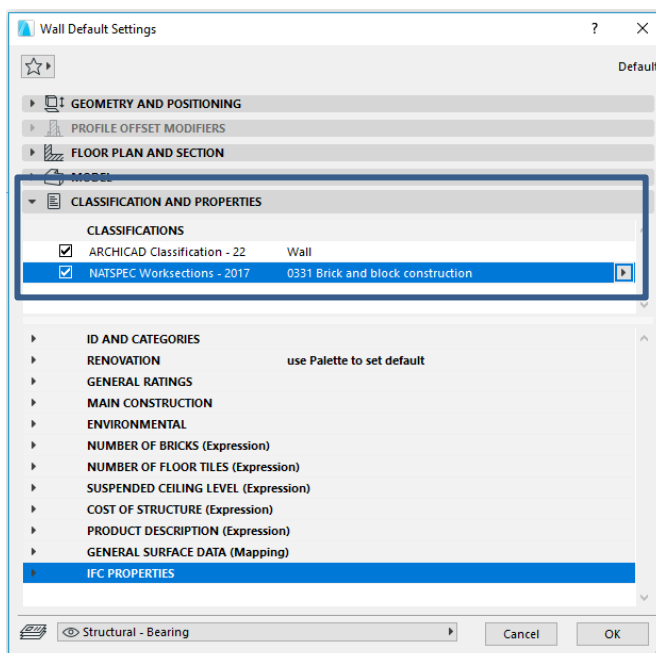




5. In the Import Dialogue locate the place you saved the NATSPEC 2017 XML file, select it and then click “Open”.



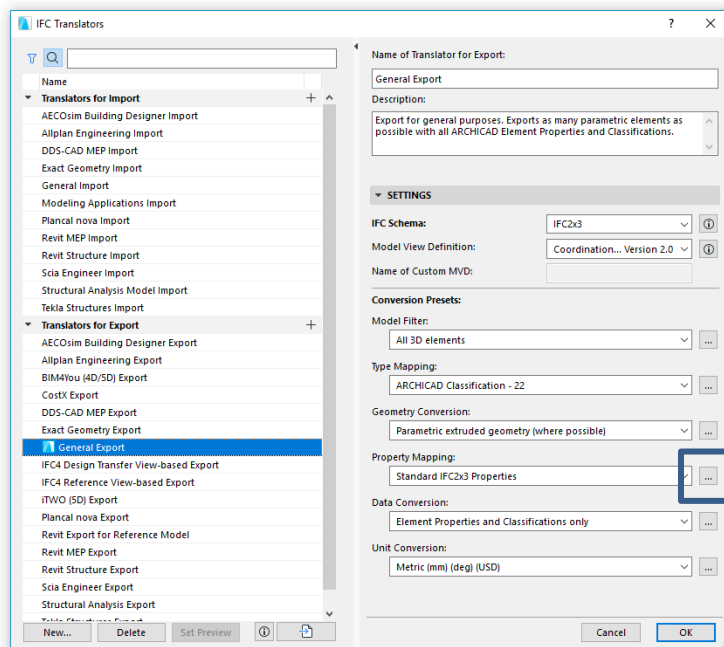
6. In the Classification Manager click “Ok” in the bottom right corner.
7. As you place elements in ARCHICAD you will need to add this additional Classification to all elements that are placed. To speed up the process it is recommended that you add this Classification to all of your Favourites to reduce the time spent adding an additional Classification each time you place it.



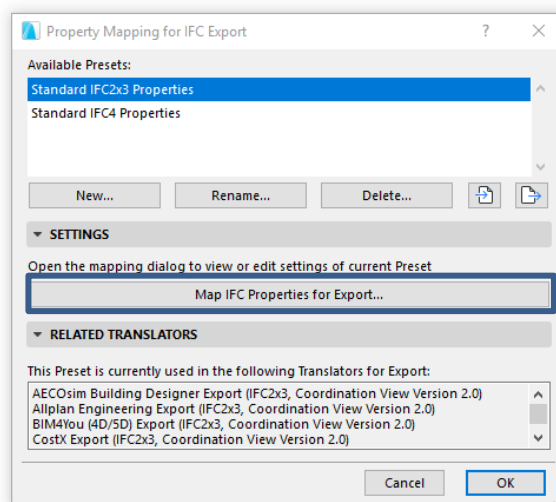
8. To enable keynoting using the Out of the Box (OOTB) Classifications and Properties Label 22 to extract the NATSPEC code at the beginning of the Classification we need to set up some IFC Mapping.



9. Open File>Interoperability>IFC>IFC Translators...
10. Select the General Export Translator or the Translator that you are currently using with the ARCHICAD ICON beside it.

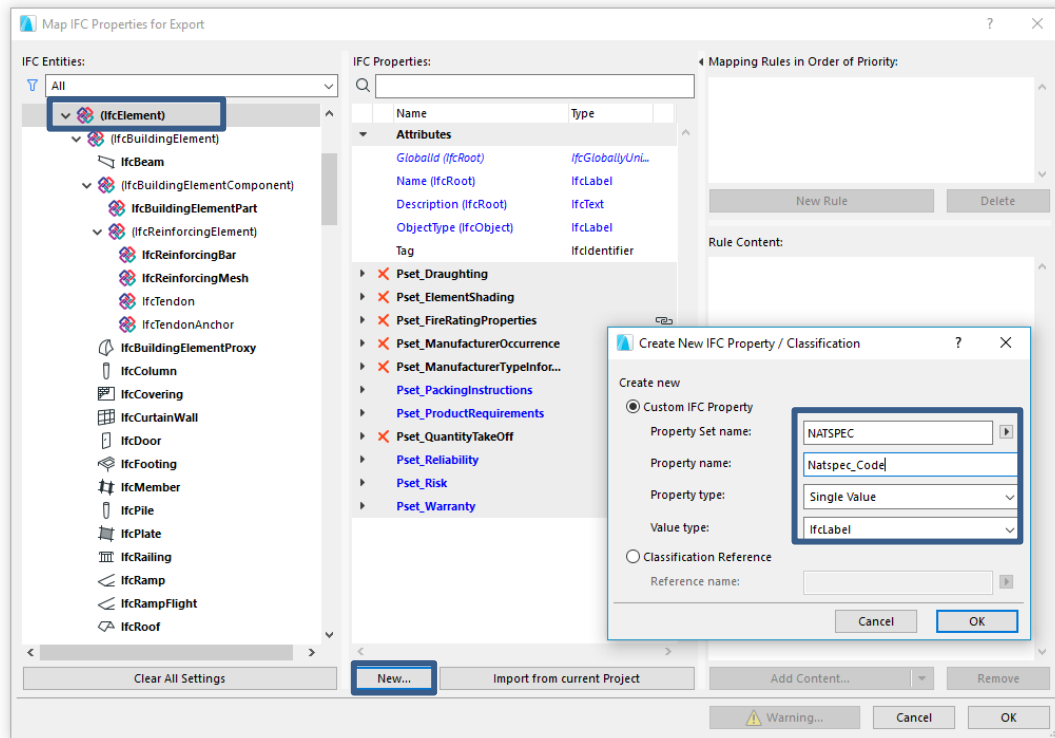


11. In the IFC Translator Dialogue click on the “...” icon to the right of the Property Mapping heading.
12. In the Property Mapping for IFC Export dialogue click on the “Map IFC Properties for Export...” button
13. In the Map IFC Properties for Export Dialogue. In the far-left column select the (IFCElement) level.

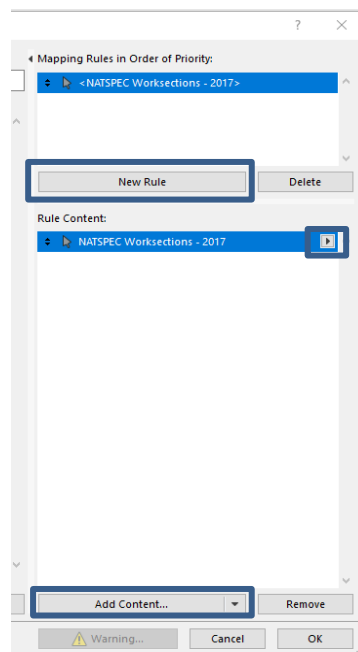




14. In the middle column click on the “New...” button
15. Create a New IFC Property Set name: “NATSPEC”, Property Name: “Natspec\_Code”, Property Type: “Single Value”, Value Type: “IfcLabel” then click “Ok”

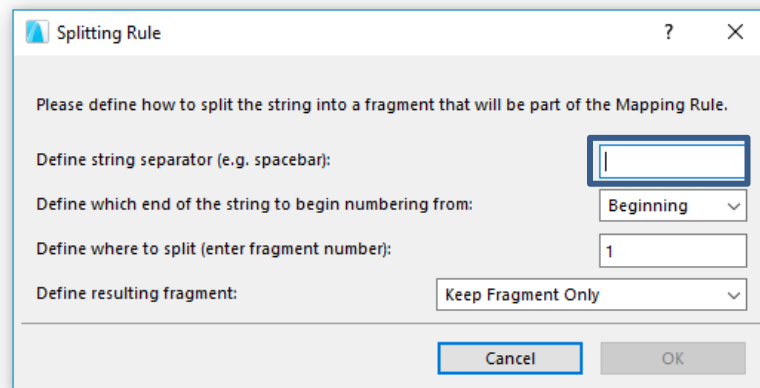


16. In the right column click on “New Rule” and “Add Content...” Under Classifications select “NATSPEC Worksections – 2017”
17. Click on the arrow to the right of “NATSPEC Worksections – 2017” then click on the “Apply Splitting Rule” tab





18. In the Splitting Rule Dialogue, in the Define string Separator (e.g. spacebar): click in the box and click once on your spacebar to use the space between the code and the text as the splitting character. The other three parameters are to be retained as shown in the diagram below. Once complete click “Ok”

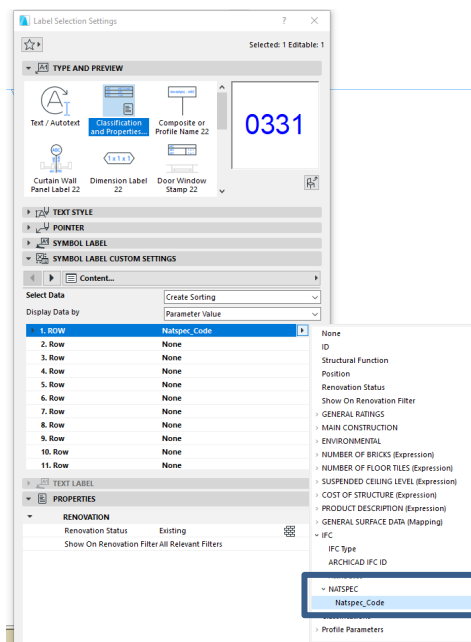


19. Click “Ok” in the “Map IFC Properties for Export” Dialogue
20. Click “Ok” in the “Property Mapping for IFC Export” Dialogue
21. Click “Ok” in the “IFC Translators” Dialogue
22. Prior to creating a Favourite you will need to place a “Classification and Properties Label 22” associated to an element. This makes the IFC properties accessible.
23. Once placed open the dialogue and change the label to the following settings.

Select Data: Create\_Sorting

Display Data by: Parameter Value

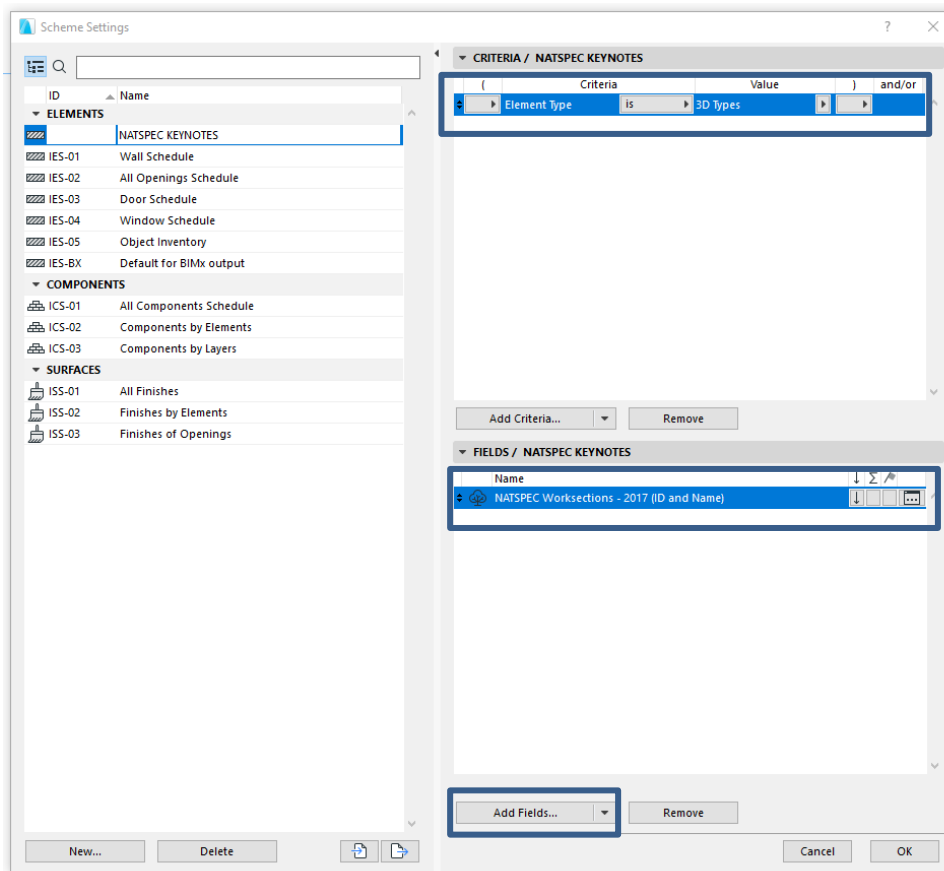
1. Row: IFC>NATSPEC>Natspec\_Code





24. Once you have done this step you can graphically make it appear the way that you want it to appear. Then save as a “Favourite” to use on future elements.
25. To create a simple legend for your NATSPEC keynotes you create an Element based Interactive Schedule. In the Navigator>Project Map>Schedules>Elements

The Schedule ID can align with your current template workflow  
The Schedule Name can align with your current template workflow  
Adjust the Criteria to “Element Type” is “3d Types”  
Click on “Add Fields...”  
Select Classifications>NATSPEC Worksections – 2017 (ID and Name)



Note that your keynote legends can be refined by layer combinations / storeys or how you see fit, if you want to reduce the list that appears on each drawing.