

## Recommended use for design & construction clients

### Context:

This document is geared towards clients who wish to define project content creation and data standards within projects that will support consistency through ANZRS minimum compliance requirements. The intention is to clearly communicate with consultants without making the standards unachievable.

- Whilst the ANZRS standard was initially designed for use in the creation of shared and sold content, there is becoming an apparent need for ANZRS to respond to clients attempting to employ some of the ANZRS standards in a meaningful way.
- In order to achieve this, there are a few minor items that may need to be considered by clients that would otherwise be highly problematic, given many consultants may have already developed their own company standards.
- It is important to note that ANZRS was never intended to be used as a 'stick' *against* Architectural or Engineering firms by enforcing such rigorous standards that it becomes economically unsustainable to achieve or maintain.

We are aware of certain projects around Australia and New Zealand where ANZRS is being mandated. Whilst we are pleased to see that the industry is supporting this initiative we recognise the need for industry guidance on how ANZRS can best be implemented – particularly on projects..

Without a good level of understanding of the document, or of Revit, some clients or client agents may not be aware which parts are worth enforcing – for what purpose, and when to do so. The purpose of this document is to provide guidance on this topic

### Implementing ANZRS

The implementation of ANZRS on a building/construction project is not necessarily as simple as just mandating it. The focus should be on what's best for the project, which in some instances may call for some requirements to be adjusted; whether relaxed, augmented or tightened. The use of the document should be linked to specific project objectives. The outputs ultimately matter more than the methodology. More than just how ANZRS should be applied is the question of when. Data requirements, for example, *may* appropriately be applied later than technical dogma may suggest. Further, who should the use of ANZRS appropriately impact? Such decisions should be reasoned.

Blindly mandating ANZRS (or for that matter, any standard) on a project without adequate consideration of project needs may represent particular risks, including but not limited to:

- Confusion within the project team, particularly if other standards are mandated in addition – where the two may conflict
- Damage to team morale; birth or stimulation of adversarial relationships (undermining collaborative intentions)
- Cost overruns. These may or may not directly impact the project. They may only apply to project contributors.
- Legal disputes over ownership of content and/or IP.
- Inefficient use of available project resources (such as remodelling content that would have served its purpose as it was)

The following table provides a short list of specific items that address this concern. Any compliance that is not discussed below remains included in the compliance requirements in projects by clients who choose to apply the ANZRS standards to their projects.

Reference	Topic	Recommendation
C1 - 1.01	Family naming	<ul style="list-style-type: none"> <li>• It is poor practice to use prefixes or suffixes in family names to distinguish originating sources of the components.</li> <li>• ANZRS provides for distinction from one component author from another, by the use of the CreatedBy_ANZRS shared parameter. Family instances can be individually inspected or scheduled to determine their respective authors.</li> </ul>
C1 – 5.03	Compliant subcategory naming	<ul style="list-style-type: none"> <li>• In the context of a project team, where each member already possesses a library of components, the ANZRS subcategory list may not need to be imposed on the consultant team members.</li> <li>• The most fundamental requirement in this case would be the use of a structured subcategory list, maintaining a consistent syntax and avoiding unnecessary and problematic duplication (as outlined in the ANZRS Reference document called R2, items 19.06 and 19.07).</li> </ul>

C1 – 6.01 & 6.03	Parameter naming	<ul style="list-style-type: none"> <li>• We do not endorse any project requirement that insists that firms take ANZRS Shared parameters and rename them in any way. Such a request would be considered poor project management practice. Renaming of any Shared Parameter (once 'released' into active use) is problematic.</li> <li>• In projects where multiple architectural or engineering firms are working in collaboration we would encourage teams to use the same agreed Shared Parameters to ensure that all relevant and key data can be scheduled consistently.</li> <li>• Where client firms see value in using predefined Shared Parameters such as the ANZRS Shared Parameter list we support such a decision.</li> <li>• ANZRS does not endorse the practice of adding a company-specific prefix or suffix to Shared Parameters to distinguish one company's data from another's. This is essentially trying to 'fit silos into the sandpit', contrary to collaborative practice..</li> <li>• We propose that clients, BIM advisors and consultants go through the ANZRS Shared Parameter lists to determine exactly which Shared Parameters will be required for the project.</li> <li>• We want to discourage firms from committing to providing and maintaining data that is not within their field of expertise scope of services. Many of the ANZRS Shared Parameters were created for manufacturer-specific content where such information was relevant and appropriate for manufacturers to fill in. Where generic (i.e. unspecified, manufacturer-agnostic) content is being used, some Shared Parameters may be redundant.</li> </ul>
C1 – 6.02	Manufacturers' and Company authoring details	<ul style="list-style-type: none"> <li>• Manufacturer details should only be added to non-generic content. Clients (or their project teams/advisors) should determine prior to project commencement where such data should reside. It is not essential for manufacturing data to be in the Revit family or project environment – especially if the object is not yet specified, or will be specified by another party at some future point.</li> <li>• Tracking original owner vs. future modifier of content is accommodated by two ANZRS Shared Parameters: CreatedBy_ANZRS and ModifiedBy_ANZRS. The sharing of content and lines of responsibility around it should be agreed within the project plan. For large or complex teams, it can be agreed upfront to include company name and the full name of the individual in either or both of these fields. This will allow team members to easily identify and contact a component editor when necessary.</li> </ul>
Not referred to in any ANZRS document.	General – Parameter use	<ul style="list-style-type: none"> <li>• It is not usually necessary that <i>all</i> parameters within a family should to be Shared Parameters.</li> <li>• Those determining data (parameter) needs must consider how the information is to be used downstream. 'Regular' parameters can be swapped later for Shared Parameters if required, but any expectation that <i>all</i> parameters in <i>all</i> families must be Shared Parameters is overkill.</li> <li>• There has been a tendency in the design and construction industry to generate excessive amounts of data within Revit simply because it is then centralised and is possible. Fortunately the trend is now moving towards firms and clients' becoming more discerning ('savvy') about what information is appropriate at various project stages, <i>where</i> it should be created and maintained, as well as <i>who</i> is best equipped to create and manage relevant data, and <i>when</i> this should occur.</li> </ul>
C1	All other requirements	<ul style="list-style-type: none"> <li>• It is our belief that all other ANZRS minimum compliance requirements can be applied to projects</li> </ul>
C2, C3, C4, C5	All other requirements	<ul style="list-style-type: none"> <li>• Whilst we believe that all these requirements could still be applied in a project environment (with the exception of items listed above) it remains the responsibility of consultants to negotiate the appropriate scope of work that they are willing and able to commit to on any given project.</li> </ul>

## Key ANZRS compliance documents

Below is an overview of documents within the ANZRS pack that may or may not be applicable to consultants within a project environment.

FORMS	COMPLIANCE (ALL DISCIPLINES)	C1
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- |     |  |
|-----|--|
| C1  | Minimum Compliance - Checklist               |
| C1s | Minimum Compliance - Summary of Requirements |

**C1** serves as a simple, brief checklist for content authors or auditors to use to ensure quality and performance requirements are achieved. All items in this checklist must be satisfied for each component to be deemed compliant with ANZRS.

**C1s** is to be used in conjunction with C1, and includes explanatory information about each item to be checked.

These documents must be **adhered to in order to comply** with the Australia and New Zealand Revit Standards (ANZRS) for content creation.

FORMS	COMPLIANCE (DISCIPLINE SPECIFIC)	C2 - C4
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|-----|--|
| C2  | Architectural/Interiors Compliance - Checklist               |
| C2s | Architectural/Interiors Compliance - Summary of Requirements |
| C3  | Structural Compliance - Checklist                            |
| C3s | Structural Compliance - Summary of Requirements              |
| C4  | MEP Compliance - Checklist                                   |
| C4s | MEP Compliance - Summary of Requirements                     |

**C2**, **C3** and **C4** each set out discipline-specific requirements for Architecture/Interiors, Structural and MEP, respectively.

**C2s**, **C3s** and **C4s** is to be used in conjunction with **C2**, **C3** and **C4**, and includes explanatory information about each item to be checked.

These documents must be **adhered to in order to comply** with the Australia and New Zealand Revit Standards (ANZRS) for content creation.

FORMS	SHARED PARAMETERS (DISCIPLINE SPECIFIC)	C5 - C7
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|----|--|
| C5 | Approved Shared Parameters List – Architecture/Interiors |
| C6 | Approved Shared Parameters List – Structure              |
| C7 | Approved Shared Parameters List – MEP                    |

**C5**, **C6** and **C7** are tables of Shared Parameters for Revit (again, for Architecture/Interiors, Structural and MEP, respectively) that, when incorporated by multiple content creation sources, will achieve a previously unmatched level of interoperability and consistency between content and how it is scheduled.

The shared parameters within these documents **must be adhered to in order to comply** with the Australia and New Zealand Revit Standards (ANZRS) for content creation.

Any additional shared parameters that have not been listed in these documents can be created by the content manufacturer and named according to their preferred standards. Naming conventions have been recommended in R2 (Best Practices) section.