



**NATIONAL BUILDING
PRODUCTS COALITION**

Building Product Information

Traceability and Digitalisation Guide

Who are we?

An industry alliance to advance the recommendations of the *National Building Product Assurance Framework* developed in response to the *Building Confidence Report*.

Purpose – building products used in Australia can be trusted and are fit to be used for their intended purpose.

Working to –

- streamline and improve understanding of product compliance processes
- clearer responsibilities, improved traceability and better access to verified data.



Members & Supporters



National Building Product Assurance Framework

Element 1 - NCC Evidence of Suitability

Element 2 – Information Obligations

Element 3 – Product Traceability and Identification

Element 4 – Surveillance, Research and Information Sharing

Element 5 – Compliance and Enforcement

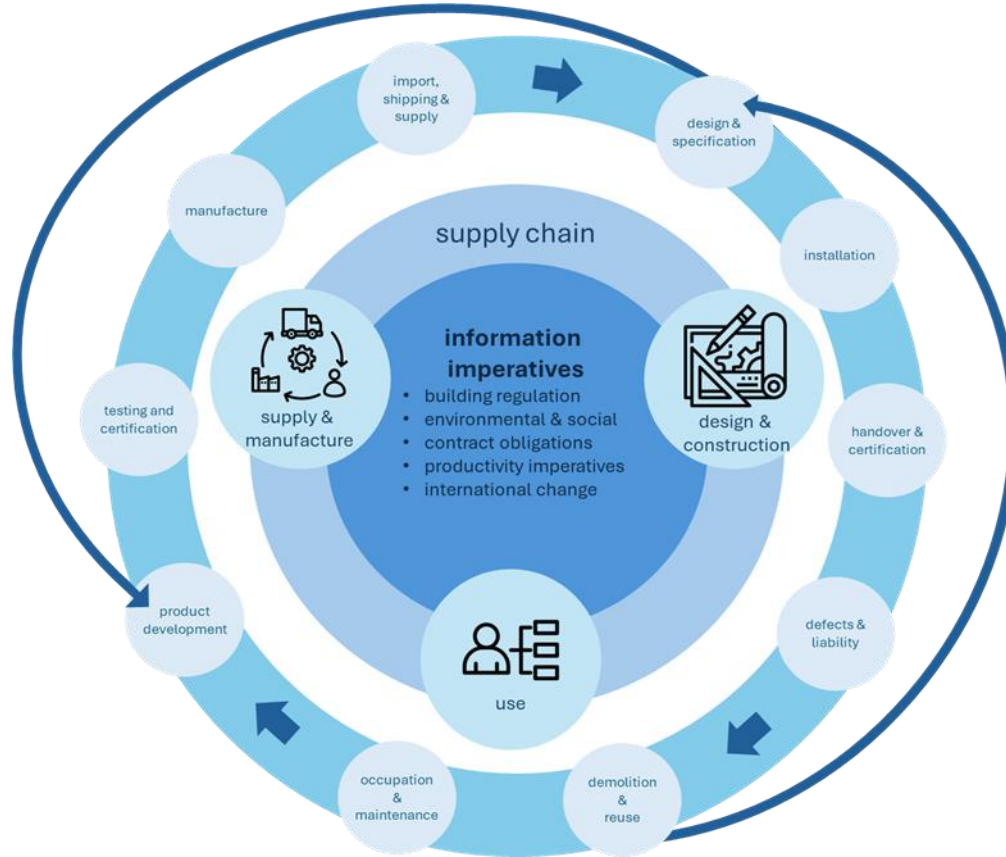
What is Digital Traceability?

securely linking building products to uniquely identified and verified data.

confirm what a product is, where it came from and whether it meets the standards required for safe use or other essential criteria

each step in the supply chain generates data that becomes part of the product's digital record (test results, certification details, delivery and installation data, and maintenance records)

through an interoperable digital system, this data can be securely shared and verified by multiple parties.





Why digital traceability

Managing Risk

- ✓ non-conformance
- ✓ product substitution
- ✓ warranty claims recalls
- ✓ record of compliance

Productivity imperative

- ✓ build more, more affordable, faster

Building regulation

- ✓ National Construction Code
- ✓ building product safety legislation
- ✓ building manuals

Environmental and social requirements

- ✓ climate risk reporting
- ✓ modern slavery
- ✓ greenwashing
- ✓ carbon reduction
- ✓ circular economy
- ✓ client / industry targets

International change

International trade digitisation

International trade systems are one area where there has been considerable progress towards increased digitalisation of product traceability.

- UN Transparency Protocol
- Universal Data Protocol
- European Union's Digital Product Passport
- World Trade Organisation Single window



Information needs

most effective when each participant in the supply chain captures and shares accurate data.

manufacturers, suppliers, designers, contractors and asset owners all play a role in maintaining data accessibility and integrity

- **product manufacture & supply**
- **design & construction**
- **use & reuse**



Protocols

1. Outcome-based
2. Verifiable
3. Transparent
4. Secure
5. Interoperable
6. Continuously improving

Data Requirements

Product attribute data

- manufacturing details
- testing, inspection and certification evidence
- environmental or social impact data

Transaction data

- supplier identifiers
- batch numbers
- delivery records
- project / installation site

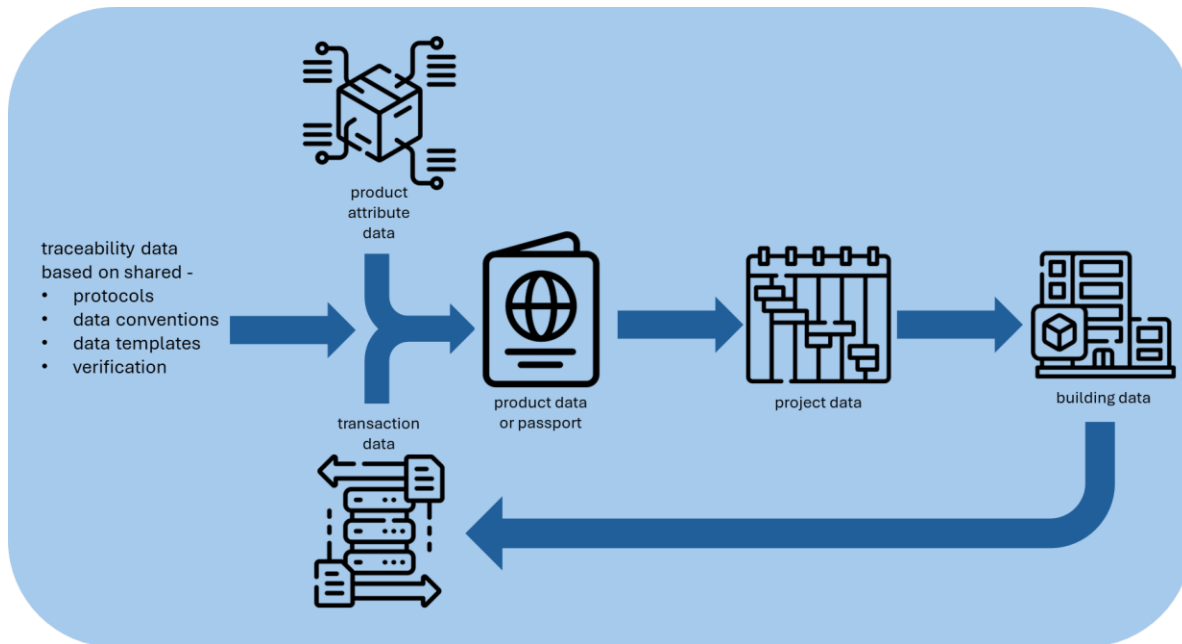
Data Conventions

how information is formatted, labelled
and linked across different platforms

shared conventions ensure
consistency and ease of exchange
between partners

→ **standards**

→ **classification frameworks**



Verification

critical element of traceability

ensures the data recorded against a product is accurate and trustworthy

can take different forms – 3rd-party certification, automated data validation, checks by recognised authorities

→ **UNTP** - a global framework for how verified information is shared securely across supply chains. It uses a decentralised model that allows organisations to exchange data with confidence while retaining control over what is shared and with whom.

Where is it happening

- Australasian Certification Authority for Reinforcing and Structural Steel (ACRS)
- Supply Chain Modernisation Project
- Timber Chain of Custody Certification
- National Traceability Advisory Group
- Building 4.0 CRC
- Agriculture Traceability Protocol



Call to Action

Project setting – Define the goals, expected benefits, and scope of traceability within your organisation or project.

Diagnosis – Map product flows and existing data systems, identify critical traceability points and assess any gaps.

Design – Establish identifiers, data templates and technical requirements for sharing information across partners.

Deployment – Implement systems, train users and run pilot projects to test functionality.

Review and continuously improve – Evaluate performance, gather feedback and refine systems to improve coverage and accuracy.



Common Data Template

Data elements	Classification / Description	Required / Optional	
Product Description	globally unique identification number	based on AS ISO/IEC 15459.6 accredited product identification standards such as a Global Trade Item Number (GTIN)	required
	manufacturer's identifier	SKU or manufacturer's number	optional
	product name	public name of the product	required
	brand	public brand of the product	required
	description	product description	required
	part and/or model number	based on AS ISO/IEC 15459.6 accredited product identification standards such as a Global Model Number ⁶	required
	product type /product classification	Global product category (GPC), (e.g. Uniclass, UNSPSC etc.)	optional
	net content	(e.g. grams, kilograms, tonnes)	required
	unit of measure	(e.g. each, box, bundle, carton, pallet,)	required
	variant	(e.g. colour, size, chemical composition)	required
	serial number	Number	required if applicable
	batch identifier	number	optional
country of origin	description	optional	
country of sale	description	optional	

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National Building Products Coalition

An industry alliance from across the construction supply chain working to improve confidence in building products.

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