

Structural Steel Bolting and Connection Inspection Record

Blank project field record | Complete from current approved documents and site observations

Scope

Included: Receipt/use traceability and installation records for structural bolted connections where included in the project steelwork package, in shop or on site.

Excluded: Connection design, selection of bolt assembly, default torque/tension/preload values, calibration certification beyond recording supplied evidence, and acceptance of methods not specified by the project.

Use and project setup

Project field: Project / package _____

Project field: Connection drawing / revision _____

Project field: Connection / grid / level _____

Project field: Fastener assembly / lot _____

Project field: Approved installation procedure _____

Project field: Tool / serial / calibration ref _____

Project field: Installer / verifier roles _____

Project field: NCR / retest reference _____

Before inspection: Approved connection schedule and details — Identifies connection mark, bolt assembly, layout, installation method and any project-defined verification.

Before inspection: Fastener specification and supplier batch documents — Defines required product/assembly identity and the traceability evidence required for the supplied lot.

Before inspection: Approved installation procedure — Supplies the actual specified assembly, tightening/installation sequence and verification method without assuming a universal approach.

Before inspection: Tool and equipment control records — Shows which tool was used and what project-required status/check or calibration evidence applies.

Before inspection: Project inspection, responsibility and notice schedule — Assigns who installs, records, verifies and authorizes any contractual hold/witness release.

How to use

1. Identify one connection mark or a clearly bounded connection group from the approved drawing. Do not merge connections with different assemblies or methods.
2. Record fastener assembly manufacturer/type/markings and supplier lot/batch as required; link the original package documents.
3. Confirm the approved installation procedure and its revision before work. Capture the actual method applied to the connection.
4. Record tool ID, relevant tool-check/calibration evidence and actual measurement or verification only where the project method requires it.
5. Record observable installation condition, exceptions and the assigned decision separately; a checked box is not proof of a measured result.
6. Use the repeat log for each connection and continue on a linked sheet if necessary; keep bolt-lot and tool records traceable to the connection.

Important: No torque, tension, turn-of-nut or other installation value is prefilled. Use only the approved project connection detail and method; record the actual method, tool and result required for the identified connection.

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-01 Connection identity and design reference

What to observe	Connection mark, member marks, location, drawing detail/revision, connection schedule row and whether work is shop or site installation.
How to check	Locate the actual connection and compare its ID to the approved schedule and detail; resolve drawing revision conflicts before grouping results.
Acceptance basis	Each record identifies a single connection or expressly defined group under one current detail and provides a traceable reference for its assembly and inspection.
Reference to verify	Approved structural drawings, connection schedule, shop drawings and revision register; cite detail number, sheet and connection mark.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Connection mark / grid	_____
Drawing detail / revision	_____
Shop or site stage	_____
Member marks / group boundary	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-02 Fastener assembly identity and lot

What to observe	Fastener type/grade or designation, dimensions, associated components, manufacturer/pack marks and supplier lot/batch required by the specification.
How to check	Inspect packaging and actual assembly markings, compare to schedule and supplier batch documents, and preserve package/certificate references.
Acceptance basis	The installed assembly can be reconciled to the connection requirement and required lot evidence; any mixed or unidentified lot remains controlled and open.
Reference to verify	Project fastener specification, approved connection schedule, supplier certificate/package labels and material register; cite lot and applicable item.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Assembly designation / size	_____
Manufacturer / pack mark	_____
Supplier lot / batch	_____
Certificate / docket ref	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-03 Storage and assembly condition

What to observe	Condition of fasteners/components before use, separation from other lots, lubrication/coating or handling restrictions only as stated by project/manufacturer.
How to check	Observe actual packaging, storage and assembly condition; compare against project specification and product instructions, recording damage/contamination or mixing.
Acceptance basis	Fasteners remain identifiable and are handled within the cited project/product requirements; any condition concern is referred and not accepted by this blank record.
Reference to verify	Project handling/storage clause, supplier instructions and approved fastener submittal; cite document revision and affected lot.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Lot / storage location	_____
Observed condition	_____
Segregation / mixing check	_____
Exception / evidence ref	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-04 Approved installation procedure and method

What to observe	Procedure ID/revision, fastener assembly, installation method, sequence, required operator role and project-specified check method.
How to check	Review the approved project procedure for this exact connection; record the method actually used and compare with the documented sequence.
Acceptance basis	The actual method and assembly are those required by the approved project documents. Missing method, conflicting instructions or unapproved deviation is referred before closure.
Reference to verify	Approved bolting/connection procedure, connection detail, project ITP and supplier instructions where incorporated; cite exact revision/step.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Procedure ID / revision	_____
Specified method / step	_____
Actual method used	_____
Deviation / instruction ref	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-05 Tool identity and readiness evidence

What to observe	Installation tool type, unique asset/serial reference, tool-check or calibration evidence required for the method and date of use.
How to check	Observe the tool used and link it to its current project-required verification record; record the actual identifier, not a generic tool name alone.
Acceptance basis	The tool used is traceable to the project-required readiness evidence for the installation method and date; a missing status record remains open.
Reference to verify	Project tool-control procedure, approved installation method and equipment verification/calibration record; cite tool serial and certificate/check entry.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Tool type / serial	_____
Date used / connection range	_____
Calibration/check cert ref	_____
Status / exception	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-06 Assembly and actual installation verification

What to observe	Observed component arrangement, fit-up/contact condition, sequence completion, actual project-required measurement/check, unit and specified method.
How to check	Inspect the completed connection and perform or witness only the checks assigned by the project; record instrument/tool and actual value where required.
Acceptance basis	Observed assembly and any measured result satisfy the cited project criterion and method; no torque, tension or acceptance value is presumed by this template.
Reference to verify	Approved drawing, project fastener method and connection-specific acceptance/verification clause; cite actual clause/detail and record raw observation.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Assembly observation	_____
Check method / instrument	_____
Actual result / unit	_____
Criterion / clause / status	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Inspection record

Project: _____ Location / room / element: _____ Lot / area: _____

SBL-07 Connection exceptions, recheck and handover

What to observe	Missing/incorrect fastener, damage, altered connection, rework, repeat verification, NCR and project-assigned final review/release.
How to check	Identify the affected connection(s), preserve the first result, cross-link instruction/rework and subsequent checks, and carry open issues into handover.
Acceptance basis	Each exception has a traceable instruction and actual recheck evidence; closure/release is recorded by the role assigned in the contract, not inferred from form completion.
Reference to verify	Project NCR/rework process, approved engineering instruction, inspection schedule and connection dossier; cite NCR, recheck date and assigned role.
Project criterion / actual approved document and revision	_____

Record field	Actual value / reference
Connection / affected scope	_____
NCR / instruction ref	_____
Recheck actual result / unit	_____
Handover / decision role	_____
Result / status (Pass / Fail / N/A / Pending)	
Inspector name / role / date	
Evidence / photo / report reference	
Issue / disposition / recheck evidence and date	

Connection installation and verification log

Use one line per actual connection or per project-defined identical lot only when the approved procedure allows that grouping. Record the actual installation method, tool reference and project-required check. Leave result/status blank until the check occurs.

Project / contract: _____ Element / pour / lot: _____ Date / shift: _____

Location / area: _____ Record reference / revision: _____

Date / work stage	Connection mark / location	Drawing detail / revision	Fastener lot / assembly ID	Approved procedure / revision	Actual installation method	Tool ID / check evidence ref	Actual verification / unit	Status / NCR / verifier role

Issues and corrective action

Project: Location / room / element: Inspection date:

Item / date	Issue and immediate action	Disposition / corrective instruction	Recheck evidence / date	Responsible role / reference

Unresolved items: identify affected area, status, person notified, instruction / NCR reference and any condition before concealment or next work.

Bolted connection inspection handover

Project: _____ Location / room / element: _____ Date: _____

Record inspection handover status

☐ Record complete; source evidence linked

☐ Issue, recheck or project decision remains open

☐ Assigned project role review / disposition required

This record does not design or approve a connection, select installation values or replace the project fastener method and required verification. Handover and release authority must match the contract.

Handover roles and references

Recorder / inspector name and role / date _____

Assigned technical or project decision role / date _____

Supplier / fabricator contact if clarification is needed _____

Related register, report, NCR or instruction reference _____

Signatures record the named person's stated role and entry only. They do not by themselves approve design, certify compliance, release a contractual control point or authorize the next activity.

Source notes

References explain topic and record design only. They do not supply universal project acceptance values. Confirm contract documents, jurisdiction and approved product/system.

Cavoren structural steel fabrication and erection baseline

Role: Scope/topic context only; not independent technical authority or project acceptance criteria.

Locator: Existing public baseline rows STE-02 to STE-16 for material certificates, weld documentation/inspection, fasteners, erection, traceability and closeout.

Source URL: <https://itp.cavoren.net/templates/structural-steel/>

Queensland Department of Transport and Main Roads, MRTS78 Fabrication of Structural Steelwork (November 2020 listing)

Role: Topic and process-interface guidance only. Do not transfer TMR project criteria, registered-supplier conditions, Hold Points, values, frequencies or role assignments to general building work. Check the actual adopted edition and amendments.

Locator: Current Category 2 listing identifies MRTS78 for fabrication of structural steelwork; MRTS278 is separately listed for supply of structural fasteners. TMR May 2026 amendment register describes MRTS78 suite changes including traceability and removal of structural-bolt provisions into MRTS278. The TMR technical specification is scoped to Queensland transport/bridge structures.

Source URL: <https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Specifications/2-Bridges-Marine-and-Structures>

Queensland Department of Transport and Main Roads, Amendment Register (May 2026)

Role: Amendment summary only. The register does not replace the adopted technical specification and project annexures or supply universal building criteria.

Locator: MRTS78 Suite amendment entry: additional documentation for Hold Points 1 and 2, fabricator responsibility for material traceability, structural-bolt information moved to separate MRTS278, Hold Point order changes and welding-topic additions.

Source URL: <https://www.tmr.qld.gov.au/RSS-Feeds/-/media/8A5A858423EA4B3CAEB558C6394B728C.ashx>

Standards Australia, Australian Standards supporting the steel sector

Role: High-level scope reference only; project must identify adopted standards, amendments, construction category and contract criteria.

Locator: Public summary of AS/NZS 5131:2016 scope: fabrication including bolting/welding, corrosion-protection preparation/processes and site erection/modification. The standard text is not reproduced or used for clause-level criteria.

Source URL: <https://www.standards.org.au/news/australian-standards-r-supporting-the-steel-sector>

Steelwork Compliance Australia, compliance scheme overview

Role: Explains that scheme/certification status is project-specific. This blank site form does not certify fabricators, welding quality or product compliance.

Locator: Public overview describes the scheme as certification/audit for supply, fabrication and erection against project-specified AS/NZS 5131 and, where specified, AS/NZS ISO 3834; it identifies the engineer/project as choosing and specifying the construction category.

Source URL: <https://www.scacompliance.com.au/>