

JGM Protocol for Outsourced Fabrication

Purpose: This document contains the requirements for all JGM's Fabricators and define the minimum expectations to fulfill the requirements of the project.

1. Production Reporting

To ensure visibility and integration with JGM's Tekla PowerFab environment, the following protocols are mandatory:

- **Software Integration:** All production data must be exported as a .pfx or compatible XML package.
- **Reporting Frequency:** Reporting packages must be emailed to the JGM Project Manager weekly.
- **Data Requirements:** Weekly reporting must include the current status of every piece mark for the following stages:
 - **Material Status:** Received, on order or not yet ordered.
 - **Fabrication Progress and updated schedule:** To-be processed, in process, completed and estimated completion date(s).
 - **External Processing:** Sent to or returned from Galvanizer or Third-Party Painter (if applicable).
 - **Shipping Status:** Loaded and Dispatched (must correlate exactly with provided Bills of Lading).
- **Billing:** Based on progress of production and supporting documentation.
- **Traceability:** Reporting must show specific heats used in production as applicable.

2. Quality Control & Inspections

- **Documentation:** Fabricator shall provide all required QC documentation per applicable contract codes, including but not limited to welder certifications, inspection records, heat traceability, and coating measurements.
- **Hold Points:** JGM will identify specific hold points beyond standard specifications that require JGM inspection before fabrication may proceed.
- **Third-Party Inspections:** JGM will coordinate any required third-party inspections unless otherwise specified in the contract.

3. Change Management

- **Scope Creep:** No deviations from IFF drawings or additional work are authorized without a written Change Order signed by the JGM Project Manager.
- **RFI Impact:** If an RFI response impacts cost or schedule, the Sub-Fabricator must notify JGM within 24 hours.

4. Delivery Logistics

Fabricator must provide copies of all Bills of Lading (BOL) to the JGM Project Manager prior to any delivery. This applies to all destinations, including the final project site and interim stops (e.g., third-party painters or galvanizers).

Transportation Responsibility

The specific responsibilities depend on which party is handling the logistics:

- **Fabricator-Managed Shipping**
 - The Fabricator is responsible for all scheduling and transit.
 - Upon arrival at the destination, the Fabricator must provide JGM with a copy of the signed, received BOL to acknowledge completed delivery.
- **JGM-Managed Shipping**
 - The Fabricator must coordinate and schedule the pickup through the JGM Project Manager.

5. Project Closeout

Final payment will be released only after the Sub-Fabricator provides a "Closeout Package" containing, per contract but not limited to:

- A final, as-built .pfx or .xml
- A complete set of signed QC inspection reports.
- List of unused materials to return to JGM (if material was provided by JGM) for disposition

Annex A1: Detailing Requirements (JGM-Led Detailing)

This annex applies when JGM provides detailing services to the Fabricator.

1. Project Onboarding & Protocols

- **Standards:** All detailing adheres to JGM's established detailing standards.
- **Initial Deliverables:** JGM will provide a complete Drawing Schedule and Advance Bill of Materials (ABM), including secondary ABM schedules, immediately upon availability after contract award.
- **Ongoing Updates:** JGM will provide weekly updates for all remaining elements currently being detailed.
- **Sequencing:** A Sequencing Plan, will be included with the ABM.

2. Review & Submission Cycles

- **Issued for Approval (IFA, for planning purposes only):** If requested, when available, JGM will submit IFA Fabrication and Erection drawings, and the model as a .pfx file to the Fabricator.
- **IFA Review:** Fabricator may review for changes and confirm the scope per IFA release.
- **Corrections:** Any marked-up drawings will be returned to the detailer with RFA submission for any correction.
- **Communication:** JGM provides the Sub-Fabricator with direct access to both RFI and Drawing logs.

3. Issued for Fabrication (IFF) Final Release

JGM will provide the following file formats for the final release:

- **Drawings:** PDFs of all Fabrication sheets (one piece per drawing), Gather sheets, and Erection drawings.
- **Data Package:** A .pfx file or compatible XML package containing drawings, NC1 files, and IFC files.
- **Hardware:** Comprehensive Shop Bolt, Point-to-point and field bolt material lists will accompany every IFF release.

Annex A2: Detailing Requirements (Sub-Fabricator-Led Detailing)

This annex applies when the Fabricator is responsible for providing detailing services.

1. Selection & Performance

- **Vendor Selection:** The Fabricator will select a detailer capable of meeting the specific technical and schedule needs of the project, subject to JGM's approval.
- JGM's Detailing Standard will be applied and JGM's templates for all detailed drawings.

2. Mandatory Weekly Updates

To maintain project visibility, the Fabricator must provide weekly updates on progress, including:

- **Outstanding RFIs**
- **ABM**
- **IFA**
- **IFF**
- **Schedules:** A comprehensive project schedule that includes detailing milestones.

Annex B1: Material Requirements (JGM-Supplied Material)

This annex applies when JGM supplies material directly from stock.

1. Notification & Coordination

- **Pre-Delivery Notice:** JGM will email a PDF Bill of Lading (BOL) and an Excel export of materials to the Fabricator prior to delivery.
- **Documentation:** All deliveries will be accompanied by a BOL and cut lists specific to each item.

2. Receiving & Verification

- **Inspection:** The Fabricator is responsible for verifying that the received materials (shape, grade, length, and quantity) match the BOL.
- **Discrepancy Reporting:** Any material discrepancies or physical damage must be flagged to JGM within 24 hours.
- **Receiving:** The Fabricator must provide a signed and dated delivery receipt to the JGM driver at the time of delivery.

Annex B2: Material Requirements when JGM-Procured

This annex applies when material is ordered from any material supplier for the project by JGM and shipped directly to the Fabricator

1. JGM-Procured (Mill/Broker) Requirements

- **Advanced Notice:** JGM or the material supplier will email a PDF BOL prior to delivery.
- **Quality Paperwork:** Deliveries will include cut lists, heat information, and Material Test Reports (MTRs).
- **MTR Management:** The Fabricator must email copies of all MTRs to JGM at purchasing@jgmusa.com immediately upon receipt from the vendor.
- **Verification Window:** The Fabricator must verify materials against the BOL; any discrepancies or damage must be flagged to JGM within 24 hours.
- **Project Records:** A signed and dated delivery receipt must be emailed to the JGM Project Manager and Purchasing (purchasing@jgmusa.com).

2. Specialty Materials & Coatings

- **CVN / FCM:** For Charpy V-Notch or Fracture Critical designated materials, the Fabricator must provide certificates *for every individual piece* to the Project Manager.
 - CVN testing per project documents or specifications which may require the sub-fabricator to perform such testing
- **JGM-Supplied Paint:** If JGM supplies paint, it will arrive with Safety Data Sheets (SDS) prior to the start of fabrication.



- **Galvanizing:** Fabricator will procure any specialty tags required for the galvanizing process.
- **Documentation Email:** Email copies of signed receipts/BOLs, and product documentation (e.g., SDS) to purchasing@jgmusa.com.

Annex B3: Material Requirements, Sub-Sourced

This annex applies when material is ordered specifically for the project by the Fabricator. Applicable to all raw materials, buyout materials, hardware, and coatings.

1. Sub-Fabricator-Sourced Requirements

- **Procurement Transparency:** The Fabricator, will provide JGM with copies of all purchase orders and receipts for materials they procure.
- **Compliance Documentation:** Per contracted code or specifications, Fabricator must scan and email the BOL, heat information, and MTRs to purchasing@jgmusa.com and the JGM Project Manager.

2. Specialty Materials & Coatings

- **CVN / FCM:** For Charpy V-Notch or Fracture Critical designated materials, the Fabricator must provide certificates *for every individual piece* to the Project Manager.
- **Galvanizing:** The Fabricator must provide any specialty tags required for the galvanizing process.
- **Documentation Email:** Email copies of POs, signed receipts/BOLs, and product documentation (e.g., SDS) to purchasing@jgmusa.com.