

Quality Plan

Contract Number: **T6676**
Project: Back Turner Street
Location: Manchester
Nature Of Work: Unitised Curtain Walling, Stick Curtain Walling, Windows & Doors
Client: DOMIS
Document No.: QPT001
Principle Contractor: DOMIS

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Summary:

Quality Plan to support the above contract.

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QUALITY PLAN CONTROL

Control of this Manual rests with the Quality Manager who is responsible for the content and control of all numbered copies.

Revision Status

The revision status of each page of this Manual is stated at the bottom of the page.

QUALITY PLAN IDENTIFICATION

This document is a **Controlled** copy.

Copy Number 1 of 1

Issued to: Craig Needham

Title: Quality Manager

DISTRIBUTION CONTROL

“Uncontrolled” and “Controlled” copies of this Manual maybe issued as follows:

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	C			

DISTRIBUTION CONTROL

This list may be subjected to amendment, whereupon a new issue will be distributed and recorded on the Revision and Amendment Register.

CHANGES TO THE QUALITY PLAN

Any changes, additions or alterations to this Quality Plan must be addressed to the Quality Manager. Should the change, addition or alteration be approved after a consultation period with other areas then the relevant amendments will be made, recorded on the Amendment Register and distributed according to the distribution list contained in this section.

Notice to Commercial System International Employees

Documents published on the company document management system are the latest available approved versions and are considered the ‘master’ copy. Printed copies need to be verified as the latest versions prior to use. Users should be aware that the electronic copy is subject to change and as such printed copies should not be retained

BS EN1090-1	CE Structural	Steel Welding Classification
BS EN13830	CE Windows	Non Structural Aluminium
BS EN14351	CE Curtain Walls	Non Structural Aluminium
ISO 3834-2	Quality Management System	Welding on Structural Steel
ISO 9001 2015	Quality Management System	Guidelines for Performance Improvements
ISO 9001 2015	Quality Management System	Requirements
ISO 9001 2015	Quality Management System	Fundamentals & Vocabulary

Abbreviation	Meaning
BS	British Standard
NCR	Non-Conformance Report
ITP	Inspection Test Plan
ISO	International Standards Organisation
PQP	Project Quality Plan
QA	Quality Assurance
WO	Works Order
QMS	Quality Management System
NDT	Non-destructive Testing
RFI	Request For Information
SHE	Safety Health Environmental
CAR	Corrective Action Request

1. Scope

1.1 Project Quality Plan Scope

The PQP defines the QMS that shall be implemented on this project to deliver Commercial Systems International Limited Contract No. **T6676**

Contact No. **T6676** is hereafter referred to as **Contract**

Commercial System International is hereafter referred to as **CSI**.

Domis is hereafter referred to as **Customer**

This **PQP** is based on the procedures of the CSI management system and reference should be made to these procedures for further details.

To satisfy unique project requirements CSI may implement project specific procedures in lieu of standard company procedures and these procedures are identified in this PQP. Project specific procedures are assessed against CSI Standard procedures to ensure they do not conflict with or negate CSI policies.

Standard Operating Procedures **SOPs** or Works Orders **WO** referenced in this PQP are not for publication but may be viewed at the **CSI office** or **CSI approved parties**.

1.2 Project Scope of Works

Unitised Curtain Walling, Stick Curtain Walling, Windows & Doors

1.3 Applicable Documents

Document Applicable to this contracts are as follows;

- A. Customer Contract Document
- B. Project Quality Plan (PQP)
- C. CSI Quality Management System and associated form and records

1.4 Project Quality Planning

The project will be managed in accordance with this PQP, which is based on the CSI Quality Management System conforming to BS EN ISO 9001:2015, as detailed and/or qualified below, as well as the Customer Contract Documents.

1.5 Document Precedence

Where conflicting procedures are encountered the Customer Contract documents and this PQP shall take precedence (in that order).

3. Quality Policy Statement

3.1 Quality Policy

Commercial System International Ltd company operations and services cover the field of 'The design, manufacture and installation of glazing and cladding systems and the design of bespoke steel and aluminum works'.

The company's operations are split into three separate operational areas;

- 1. The Design, Fabrication and Installation of non-structural windows door sets and curtain walling in either steel or aluminum*
- 2. The Design, Fabrication and Installation of Bespoke Aluminum or Steel works with a specialty in Art Works working with artists and architects on a number of marque commissions.*
- 3. The Design Fabrication and Installation of Welded structural steel and welded structural aluminum works to Execution Class Three, within the company certified BS EN 1090 and ISO3834 Quality Management Systems.*

Commercial Systems International's purpose is to deliver Total Customer Satisfaction. This is achieved by both organisational and individual commitment to;

- 1. Customer focus,*
- 2. Superior Process Management,*
- 3. Continuous Improvement*
- 4. Employee Involvement.*

This Quality Policy applies to all operations when setting quality objectives within our business, and is continuously reviewed to ensure its continued suitability and improvement. The systems and procedures within the Company's Documented Quality System are constantly managed to the requirements of ISO 9001:2015.

This quality policy and the quality management system ensure that CSI Ltd achieve the Quality Objectives that have been set. Implementation is led by Top Management and filtered down through managers, supervisors and the rest of the team through a series of continuous training, appraisals, personal development and agreed procedures.

Signed:

Dez Craven

Date:

4. Project Management Responsibility and Organisation

The general functional responsibilities for key positions, as detailed on the project Organisation Chart, are as detailed in the following paragraphs.

4.1 Director Project Management

The General Manager reports to the Managing Director and is responsible for providing direction and Commercial Systems International's approval of policies and methods of execution for the contract by Commercial Systems International.

4.2 Contracts Manager

The Contract Manager is responsible for overall planning, control and execution of the project in a cost-effective manner and shall ensure compliance with the Contract technical specification, program, Commercial Systems International financial and commercial policies and practices, safety and environmental requirements including the development, coordination and authorisation of the site specific management plans, incorporating the Customer's site specific policies and procedures. The Contract Manager shall manage the project to meet customer expectations and needs through management system audits, management reviews, customer feedback, performance monitoring and continuous improvement to achieve customer satisfaction. This position has overall authority in determination of all quality related matters affecting the project. The Contract Manager also has direct access to the CSI's Quality Manager to resolve quality issues should this be necessary.

4.3 Project Manager

The Project Manager is responsible to the Contracts Manager for overall planning, control and execution of the project in a cost-effective manner and shall ensure compliance with legislation, the Contract technical specification, programme, Commercial Systems International financial commercial, quality, safety and environmental requirements. The Project Manager shall manage the site to meet customer expectations and needs through management system audits, management reviews, customer feedback, performance monitoring and continuous improvement to achieve customer satisfaction. This position has overall authority in determination of all quality, safety & environmental related matters affecting the Site. In addition the Project Manager has direct functional access to the Commercial Systems International Quality Manager to resolve quality issues should this be necessary.

4.4 Supervisors (Sub Contractor)

Supervisors are responsible to the Site Manager to implement the requirements of the management system.

5. Quality Documentation

5.1 Document and Data Control

Documentation applicable to this contract will be controlled based on CSI QMS Procedure [QSP001 Document Control](#).

The formal exchange of documents of significant information will be exchanged through an agreed method of document control.

5.2 Document Numbering System CSI

5.2.1 Control of Project Documents

All document references must conform to the Approved Naming Standards Table ([QSP001F4](#)). Each is prefixed by a mnemonic code of not more than four characters, followed by a three-digit number. These numbers rise sequentially with each generated document (e.g. "WQMS 001", "WQMS 002", etc.).

Document	CODE
Quality Management Procedure	QSP XXX
Quality Management Form or Record	QSP XXXFX
Windows & Curtain Walling QMS	WDCW XXX
Windows & Curtain Walling Form	WDCW XXXFX
Site Procedures	SITE XXX
Site Forms & Records	SITE XXXFX
Welding Quality Management Procedures	WQMS XXX
Welding Quality Management Forms	WQMS XXXFX
Safety Health Environmental Procedures	SHE XXX
Safety Health Environmental Forms	SHE XXXFX

5.3 Quality Documents (Factory)

- End of line Quality Check Sheets
- Quality Process flow chart and procedure
- Goods Inward procedure and documentation
- Goods Outward procedure and documentation
- Non-Conformance procedure

5.4 Quality Documents (Site)

- Inspection & Test Plan
- Curtain Wall Installation Checklists
- Window Installation Checklists
- Door Installation Checklists

- Fire Screen Installation Checklists
- Design Conflict Record Sheet
- Request For Information Sheets
- Variation To Contract Record Sheets
- Acceptance/Handover Certificates.

5.5 Quality Documents (Drawing / Design Office)

- Full and Comprehensive Drawing Registers
- Design Tracker
- Design Conflict Record Sheet
- Request For Information Sheets (Engineering)
- Request For Information Sheets (Design)
- Works Order Sheets
- Material Requisition and Specification Sheets
- System Manufacturers Quality / System Manuals.

Personnel appointed to this particular contract will produce this PQP and the Project Manager will approve it.

Controlled copies of the PQP are issued by the Project Manager approved by them.

The Quality documents listed above are also subject to revision and distribution control.

These documents are reviewed and approved by appointed personnel prior to issue. Copies are then distributed to named persons and locations.

All revised documents once approved are circulated to the authorised locations and all superseded documents removed from circulation.

5.6 Project Filing System

All forms are to be in the first instance are to be saved in the project file **T****** on the CSI Database.

5.7 Control of Records

5.7.1 Quality Records

Identification, collection, indexing, filing, storage, maintenance and disposition of Contract specific records shall be carried out in accordance with QMS Procedures **QSP 006 Control of Records**. Records shall indicate persons releasing the product.

5.7.2 System Conformance Records

These records shall be maintained as required by QMS Procedures **QSP 006 Control of Records**. The following shall form the Contract requirement:

- A. Management reviews;
- B. Training records;
- C. Inspection and test plan records;
- D. Design Plan and verification, validation and design changes;
- E. Supplier evaluations;
- F. Inspection equipment calibration records;
- G. Special Process procedures and associated personnel qualifications;
- H. Non-conformances and resulting corrective actions, and
- I. Quality Audit Records and surveillance reports.

5.7.3 Product and Service Conformance Records

- A. Raw Material Certification (for critical components or pressure parts);
- B. Inspection and Test Plan (ITP);
- C. Non-Destructive Test Report (NDT);
- D. Weld Procedures;
- E. Welder Qualifications;
- F. Mechanical Test Reports;
- G. Non-conformance Reports (NCRs);
- H. Non-conformance Concession Record;
- I. Customer or Third Party Release Certificate;
- J. Installation Reports and Checklists;
- K. Commissioning Report and Checklists, and
- L. Operating and Maintenance Manuals.

6. Control of Design Process

A detailed programme is produced at the outset of the contract and all elements including drawing start times, approvals and final drawing sign offs are incorporated within this programme, this sets down time frames for all activities to be achieved by the drawing office to meet the programme.

All design and drawing activities are assigned to a qualified member of the drawing team, who are responsible to the Drawing Office Manager.

The necessary resources of personnel, hardware and software are at Disposal of the Drawing Office Manager.

All qualifications and levels of training are held by the Drawing Office Manager.

6.1 Drawing Control

All drawings are to be numbered as T***-*** and to be entered on the **Drawing Register (QSP010F1)**. This is defined in CSI QMS Process **QSP010 Design & Development Process**.

6.2 Design Input

All incoming design and documentation such as technical / engineering data, specifications, drawings and letters are reviewed by the project team for completeness, inconsistencies and their effect upon the design.

All originals received are filed in the drawings received folder. In the project file and in addition are entered into a Drawing Received Register [\(QSP010F1\)](#). for the project.

6.3 Design Output

Design output consists of a number of documents, each of which is reviewed for accuracy by qualified staff prior to use. The list includes but is not limited to:

- System drawings
- Section drawings
- Manufacturing drawing
- Structural calculations
- As-Built drawings.

6.4 Design Verification

All Commercial Systems documents are reviewed for correctness prior to release

Upon return of the drawings with comments attached all appropriate measures are taken to progress these drawings to "Status Approved"

A register is maintained to record all drawings and there status and to track approvals. [Drawing Register \(QSP010F1\)](#).

6.5 Design Validation

Design validation is assured in a number of ways that may include but are not limited to the following:

- Prototyping
- Samples
- Testing
- Benchmarks.

6.6 Design Changes

All changes to design are documented and submitted for review and Approval prior to release.

7. Procurement

Enquiries / Specifications

Commercial Systems prepare full technical specifications for all key supply items and sub contract items

Commercial Systems identifies the materials required, the timescale, specifications, budget prices, and any sub contract work required.

8. Purchasing

Commercial Systems are responsible for all subsequent Purchase Orders and their detailed content and specification.

Goods and services required by CSI shall generally be purchased from assessed and approved suppliers as defined in QMS Procedure **QSP 011 Purchasing Process**. Documentation to be included with Purchase Orders shall have a dedicated document number applicable to the document and must be listed on the Purchase Order and the **QSP010F2 Material Requisition Register** is updated

It is the responsibility of the Drawing Office team member who initially prepares or initiates changes to specification documents to ensure that the necessary issues and changes or revisions are issued to the Procurement team as applicable for arranging applicable order variations and on-forwarding.

No final invoice from a subcontractor shall be approved for payment without receipt of full documentation requested as part of the Purchase Order

In addition to the above the purchasing department are responsible for the tracking of all orders placed and to ensure the on time delivery of all items ordered and to deliver them on time to the manufacturing team.

8.1 Supplier's Responsibility

While CSI maintains the Contract responsibility for all activities, until handover to the Customer, the main responsibility for carrying out the material delivery requirements of the project rests with the suppliers. They shall ensure adequate systems and procedures are established, implemented and maintained to satisfy Contract requirements. CSI shall address these requirements in procurement and supplier documentation. Such controls shall be reflected in the relevant supplier quality plan and/or ITPs as appropriate. Assessment of the adequacy of these provisions shall be through inspection and test activities.

8.2 Process Control

CSI's role in meeting project and Contract requirements is that of a Subcontractor which includes design, procurement, inspection, installation, commissioning testing and warranty. Whilst CSI maintains overall contractual responsibility with the Customer, the specific responsibility for manufacture, supply, delivery, construction, installation, commissioning and warranty also rests with the relevant Subcontractors and is detailed in the relevant procurement documentation. Subcontractors shall detail in their respective Quality Plans the process control procedures for their scope of work. Processes which directly affect quality shall be identified and planned for all phases of the work. These processes shall be carried out under controlled conditions. CSI processes include, but are not limited to:

- a. Quality Management;
- b. Safety Management;
- c. Environmental Management;
- d. Contract Review and Consolidation;
- e. Planning;
- f. Communication;
- g. Design, Design Co-ordination, Review, Verification and Validation;
- h. Design Concession and Change Control;
- i. Procurement and Sub-contracting;
- j. Inspection and Testing;
- k. Installation;
- l. Commissioning and Performance Testing;
- m. Finance;
- n. Audits and Audit Surveillance;
- o. Document Control;
- p. Records;
- q. Handover

8.3 Identification of Special Processes (BS EN ISO 10005 5.14)

Special manufacturing/CSI inspection processes shall be identified as part of the design output where appropriate. Such processes shall be documented on the relevant engineering drawing or documented separately as Instructions, and shall be accomplished under appropriate controlled conditions by appropriately qualified personnel. Where necessary, personnel qualifications and corresponding personnel qualification records shall be maintained, together with any special equipment certification and calibration records and completed and signed ITPs.

9. Control of Non-Conforming Products

Any Non-Conforming materials discovered in the factory are dealt with in accordance with the company's NCR system **QSP 014 Control of Non-Conforming Product** and **QSP 008 Corrective and Preventive Action**.

9.1 Non-conformance Reporting

Control of Non-conformances shall be as defined in **QMS Procedure QSP008 Control of Non-conformances'**. The general steps of the procedure are as follows:

Record the non-conformance discovered on the NCR Form **QSP008F1 NCR Form**

- a) Identifying and holding products subject to an NCR in a designated holding area. For bulky or large nonconforming products which cannot readily be segregated, the area(s) of nonconformity shall be marked such that it is readily visible to any other user.
- b) Recommendation and review of disposition/rectification by responsible parties;
- c) Corrective action to correct the non-conformance;
- d) Re-inspection of the reworked or repaired product;
- e) If required obtain Customer approval for a Concession;

9.2 NCR Sources

The main sources of non-conformance may arise from but are not limited to:

- a) Receipt inspection;
- b) Manufacture, disassembly, assembly or construction processes and
- c) Final Inspection and Test process

9.3 Disposition of Nonconforming Products

Disposition of non-conformances may be achieved by:

- a) Rework to meet specified requirements;
- b) Acceptance with or without repair by concession;
- c) Regarding for alternative use, and
- d) Rejection/disposal.

9.4 Identification of Items Subject to NCR

Non-conforming items or products shall be appropriately identified, segregated and/or quarantined to prevent inadvertent use until appropriate disposition has been effected. Relevant parties such as the Project Manager and Customer shall be informed that an item is subject to an NCR.

9.5 Resolution of CSI NCR's

Where the non-conformance is related to CSI the personnel responsible for that activity (in conjunction with the Quality Manager), are responsible for:

- a) Investigating the cause of non-conformances and approving and implementing the proposed corrective actions needed to prevent their recurrence

- b) Evaluating the sources of the non-conformances by analysing relevant information as applicable, procedures, work instructions, concessions, quality records and customer complaints, in order to detect and eliminate further and potential causes of non-conformances.

9.6 Resolution of Other Parties NCR's

Where the non-conformance is related to other parties, the Quality Manager, in conjunction with the Project Manager or nominee is responsible for:

- a) Expediting the resolution of the non-conformance;
- b) Obtaining acceptance and approval of the corrective action from the relevant personnel and/or parties as required;
- c) Verifying implementation and effectiveness of corrective action through audit/surveillance/inspection as appropriate.
- d) Notification(s) of actual or potential non-conformances by the Customer shall be processed in accordance with **QMS Procedure QSP 008 Corrective and Preventive Action**.

9.7 Corrective & Preventive Action

Corrective and Preventive Action shall be carried out in accordance with **QMS Procedure QSP 008 Corrective and Preventive Action**., wherein:

- a) Non-conformances are reviewed to determine their causes and develop appropriate corrective and preventive action;
- b) Potential causes of non-conformances are identified and corrective action developed to prevent the occurrence;
- c) Corrective action is implemented and the effectiveness is followed up;
- d) Corrective action from results of audits is implemented effectively.

The need for Corrective Action is normally identified through:

- a) Non-conformances
- b) Internal audits
- c) External audits and Customer/Third Party audits.
- d) Actions identified are logged on the NCR Database from the NCR or CAR form.

10. Production Planning

A production programme is drawn up for each project taking into account the following:

- Overall Contract programme period
- Material availability
- Sub contract elements if applicable
- Labour Capacity.

The production is then planned and to be coherent with the overall project programme, this will take into account, staged manufacture and deliveries to site in accordance with site requirements. All subcontract requirements are planned and procured as part of the production plan.

11. Production Management

Production Management in conjunction with the Drawing Office Management is responsible to ensure that works orders are issued in good time as to meet the requirements of the overall programme.

Complete and final information accompanies all works orders. These are checked and then handed to the production supervisors for manufacture.

12. Factory Inspection and ITP

The quality controls inspections in the factory are carried out by means of constant set down in line quality checks. This is defined in process [QSP013 Production Control](#) for aluminium windows and curtain walls and [QSP013A Production Control](#) for steel windows and curtain walling

13. Manufacturing

13.1 Manufacturing Methods

Manufacturing shall be carried out in accordance with codes nominated in the Contract specification and CSI standards nominated in Purchase Order(s) and associated drawings and specifications.

The manufacturing activities are:

- Powder Coating, Anodising, Machining
- Assembly, crimping, pre- assembly bracketed works
- Sheet metal work
- Structural bracket fabrication
- Welding
- Quality checks
- Packaging.

13.2 Initial Type Testing

Subcontractors shall, upon completion of work, provide the above product conformance records (as applicable) to CSI in the form of an Initial Type Test Report (ITT) bound in volume for each item of manufacture. This shall be specified in the Purchase Order and no purchase order shall be approved for payment without receipt and acceptance of the

ITT and any other requested documentation. Records shall be preserved and stored as identified in [QSP006 Control of Records](#). Records shall be legible and either recorded in English or appropriately translated into English. Each subcontractor, as part of their quality plan, shall detail the procedures for control of its quality records. Reference [QSP012 Shipping & Logistics](#) and [QSP 011 Purchasing Process Flowchart](#)

14. Product Certification

All products leaving the Commercial Systems Factory have been produced in accordance with the specification required for the particular contract. Any certification of conformity is held within the contract file.

All key materials delivered into the Commercial Systems factory will carry all required certification. Reference: **Section 8** of the **PQP**.

14.1 CE Certificates

All fabricated items require an inspection certificate or, where inspected by the Customer or Third Party, a copy of their Inspection release certificate before dispatch, except where the dispatch of the products prior to final inspection has been approved by the CSI Project Manager or Nominee.

In this instance, final inspection and rectification of any deficiencies will be conducted at site by the appropriate Subcontractor to certify acceptance of the product. Evidence of non-acceptance shall be a completed Non-conformance Report (NCR).

15. Identification & Traceability

15.1 Identification

The extent of Identification of Contract specific documentation and products/materials shall in accordance with in the Contract requirement wherein all contract related documents, products (where practical) or service shall be identified with a unique Number see **Section 24** of the **PQP**.

15.2 Traceability

The extent of traceability required shall be defined in the product specification document attached to the Purchase Order.

16. Customer Supplied Products or Services

Where products are supplied by the Customer the following shall be observed:

- a) Any products that may be supplied by the Customer will be examined upon receipt at the Site for completeness, proper type and any transportation damage, in accordance with QMS Procedure **QSP 012 Shipping & Logistics**
- b) Inspection and Testing', and
- c) Damaged products will be notified in writing to the Customer

Control of these products after receipt will be in accordance with QMS Procedure **QSP012 Shipping & Logistics** wherein safe keeping, identification and traceability is assured.

17. Resources

17.1 Resource management

CSI will supply adequate staffing, supervision, labour, construction equipment, onsite transportation, consumables, offices, and safety equipment for the project, to complete the requirements of the above contracts within the project time constraints outlined in the Contract.

17.2 Material Resources

Material requirements are specified in the Contract, design specifications, inspection and test plans and in purchasing information.

17.3 Human Resources

The Contracts Manager shall ensure that project personnel undertaking work that may influence the quality of the work, have appropriate qualifications, training and experience. The Contracts Manager shall assess the training needs for the Project Team under their direct control and, if required, provide or arrange training to meet specific project requirements as defined in **QMS Procedure QSP 015 Training and Development** Procedure. Unless otherwise specified, personnel suitability shall be assessed on the basis of qualifications and/or experience as required by individual position descriptions and job specifications. Training courses shall be carried out in, but not limited to the following areas, as and when required:

- a) Site Induction;
- b) Quality Plan, QMS Procedures and WOs (Office and Site), and
- c) Environment, Health and Safety. Records (qualification reports, inductions, etc.) substantiating

Records (including, qualification reports, inductions, CSCS Cards, etc.) substantiating qualifications of new employees or additional qualifications/experience of existing employees, shall be maintained.

17.4 Training Database

The Quality Manager shall maintain CSI's and Contractor personnel records on the CSI Training Database.

17.5 Sub-contractors

Projects Manager and the Contract Administrator are to ensure that all Sub-Contractor appointed by CSI for onsite contracts, supply copies of the relevant certificates and "safety tickets" before commencing work, as required under Regulations. Copies of these are to be maintained on the company Training database.

17.6 Subcontractor's/Suppliers Role

Relevant to their scope of work, subcontractors shall identify, plan, implement and maintain the design, management, manufacture, construction, installation, , handover and warranty processes that are necessary to achieve project and Contract requirements, based on quality, cost and time requirements. These processes, including special processes, shall be carried out under controlled conditions including, but not limited to:

Where process results cannot be verified by inspection and testing of the product, and where deficiencies may become apparent only after the product is in use, the process shall be performed by qualified operators and/or require continuous monitoring and control of the process to ensure compliance with the specification. Specific requirements for any qualifications, equipment and personnel shall be specified.

Subcontractors shall have procedures to identify, control and dispose non-conformances and initiate and verify appropriate corrective action.

18. Samples

Samples shall be provided in accordance with separate, agreed list and timescale.

19. Pre-Commencement

The Project Manager shall prepare the principle programme and RAMS for the approval of the Contracts Manager. This will clearly show all site activities, and stages of build and must clearly highlight all critical dates and milestones within the contract period. (*See RAMS templates and SITE forms*).

Reference will be made to any project to the PQP, or any project-specific restrictions / regulations for operating on-site). Any queries can be requested using the Request For Information Sheet (*SITE001F3*).

In parallel with the programme, it shall be ensured that all key dates and milestones within the programme fall in line with the design and manufacturing slots. All material deliveries to site are fully coordinated with the Purchasing Department (*see QSP 011*).

CSI, when practical, will build into the programme plant hire durations, this will allow CSI to closely monitor the hire plant and ensure that we do not have redundant plant on site.

CSI when preparing the programme will plan for all labour requirements and this will be resourced to enable all key dates to be achieved.

19.1 On Site

Once all the elements that govern the site programme are agreed with the Customer and the contract starts, the Project Manager will manage and track the programme daily, ensuring that all design information and materials to complete the site programme are monitored and recorded. (*For further information on the Design & Development process, please consult QSP 010.*)

Additional information or technical guidance, shall be completed by the agreed Request for Information procedure.

20. Installation and Site Quality Checks

20.1 Installation

Installation shall be carried out in accordance with certified Contract drawings, installation ITPs, installation instructions and approved **QMS Procedure SITE001 Site Procedures**, Establishment and Installation' refers to CSI personnel activities at site.

Activity / task Method Statements are produced and submitted for review.

Where necessary these Method statements will be updated, and further submitted as the project progresses. This will allow the inclusion of detailed statements including sequencing and manners of installation, in line with the contract programme.

Following the release of areas of the project, pre-installation checks will be conducted to identify any items that may affect the installation or prevent the progress.

Survey checks shall be carried out ahead of time to assess the accuracy of work done by others that may affect our commencement on site.

20.2 Site Inspections

The Project Manager is responsible for the verification of the installation at all stages.

Detailed inspections of the finished work to be handed over will be carried using the relevant check sheets prior to handover.

20.3 QA CHECKS

QA check shall be carried out by the Project Manager as per the contract ITP. The QA checks shall be completed on the agreed QA templates and published if required.

The QA checks shall be carried out at the 'hold points' as per the contract ITP, these may include for example, on curtain wall, at the completion of stick work (levelled, foxed back, gaskets, EPDM, glass installed, pressure plate, caps, flashings etc.) and on final completion prior to hand over.

Non-conformances found during the QA checks will be processed as set out in **Section 9** of the **PQP**.

20.4 DESIGN / SITE CONFLICT REPORT

(SITE001F12 Weekly Site Status Report Form)

Design and conflict reports will be completed showing any cost and programme implications, these must be completed regardless of who is at fault be it CSI or the main contractor. Copies are to be sent to that the Contracts and Production Managers.

20.5 Handover

One acceptance certificate will be used for one area to be handed over, the areas for handover will be pre agreed before we commence on site and will be presented for handover in a fully installed condition, however any external mastic works should not delay handover.

If a situation arises where we are held up or proceeding trades are instructed to work on or around our unfinished work we will present this as a staged handover for future protection.

At practical completion a set of check sheets will be handed over as evidence that all checks have been completed and comply with the quality plan.

De-Taping

Written instruction from the customer shall be required to de-tape any work, prior to handover.

21. Monitoring and Testing of Equipment

All control and calibration of equipment used on site is performed at required intervals as stated by the manufacturer or and required by statutory laws and will carry the relevant certification.

21.1 PLANT & TOOL INSPECTION

(SITE001F13 Plant Checklist)

The Project Manager is responsible for the up keep of the site file, however the majority of checks on tools and plant are the responsibility of the competent person operating the said tools and plant for the purpose of the installation.

PUWER inspections on MEWP are the responsibility of the installer / sub- contractor and this must be done on a daily basis and recorded on the daily plant inspection record sheet. The person who carries out the daily inspection usually is the person operating the machine and must have a valid IPAF ticket, this must be done at the start of every day and before the machine is used, the results of these checks are to be recorded clearly onto the relevant sheet, dated and signed off with the person(s) name printed alongside a signature.

Power and hand tools shall be inspected, a full list of these tools shall be kept and they must be in a safe and sound condition, all leads, drills, cordless drills, battery chargers etc. must be checked weekly and all the checks recorded and logged in the site file, all non-power tools such as hammer faces, lazy tong pop rivet tools etc. must also be checked and logged on a weekly basis. The note on the tools list should read "In Good Order" unless defects shall be noted and the remedial action also noted.

LOLER inspections on lifting equipment are the responsibility of the installer / sub contractors competent person and shall must be done on a weekly basis and before use; these checks are to be recorded on the record sheet. Power suckers must be checked in the following manner; general check for damage, battery charge, suction pads, and function (attach the sucker to a unit of glass) Please Note that vacuum lifters must be checked by a third party on six monthly intervals and must carry a valid test certificate.

Mobile Scaffold Towers and podiums are the responsibility of the installer / sub-contractor and must be checked and recorded when first built and then every seven days, if the tower is moved or stripped and re-assembled it must be re-checked and recorded, this shall be done by a person holding a valid PASMA ticket and recorded on a scaff tag, the scaff tag must be visible to all using the tower and must be kept in a good and legible condition.

All scaff tags must be checked before using any scaffold.

22. RISK ASSESSMENTS & METHOD STATEMENTS

(SITE001F1 Blank Method Statement, SITE001F2 Detailed Method Statement, RAMS & COSHH, SITE001F7 Method Statement – Risk Assessment Register, SITE001F8 Risk Assessments Template, SITE001F9 Blank Work Risk Assessment)

All contracts must have full and comprehensive Method Statements and Risk Assessments (RAMS) from the outset; these must be site specific and not generic. They must be constantly revised to accommodate changes to the site process if and when they arise. All RAMS must be given to the main contractor, you must also ensure that the fixing

crews have read the RAMS and fully understand them, they must then sign a copy to confirm their full understanding of both the Method Statement and the Risk Assessment. A full up to date copy should be filed in the site office.

22.1 Toolbox Talks

(SITE001F10 Tool Box Talks Register, SITE001F7 Method Statement – Risk Assessment Register)

The Project Manager shall administer any Toolbox Talks. These shall done on a regular basis, usually weekly and must be recorded on a Toolbox Talks Register. In the absence of the Project Manager, a competent site supervisor can conduct these talks and shall be qualified to at least SSSTS standard. When giving these talks the Project Manager shall ensure that all who have attended fully understand the talk and be aware that they may attendees who only have Limited English language.

23. Product Identification

Maintenance of materials / product identity is mandatory throughout the procurement process, from receipt into the storage areas. All products/components shall be identified by the most appropriate means, which may include but not limited to the following:

- Original packaging
- Drawings
- Storage bin / rack location
- Tape with written identification
- Markings
- Delivery Notes
- Any other acceptable method.

24. Handling, Storage, Packaging, Preservation and Delivery

24.1 Packaging, preservation, marking and delivery

Packaging of goods for delivery shall adequately protect the goods against damage and deterioration. Inspection prior to dispatch shall be carried out. Appropriate delivery documentation shall be provided according to specified requirements.

All material delivered to site will be checked against the delivery note for:

- Identification
- Quantity
- Obvious transit damage
- Availability of Certificate of Conformity

When confirmed as satisfactory the note is signed off and a copy filed in the site office, and a copy sent to head office.

Issues are to be managed in accordance with the Non Conformance Procedure **QSP 014 Control of Non-Conforming Product**.

Any materials delivered from a third party should also be checked and any damage to goods **shall** be reported to the Purchasing Department within **24 HOURS** to enable us to report the damage to our supplier and request replacement goods per requirements of the **QMS Procedure QSP012 Shipping & Logistics**

24.2 Handling

Items and products received at CSI premises or site shall be handled in a manner that avoids damage or deterioration.

24.3 Storage

At site, goods shall be stored in a designated storage area or lockable compound, where practical, to prevent loss or damage and where necessary suitably protected against climatic conditions and deterioration.

In all cases goods shall be suitably tagged or marked for identification purposes. Goods stored shall be documented and shall be subject to regular monitoring in order to establish their continuing fitness for use.

All plant and equipment shall be protected to ensure no deterioration.

Nonconforming goods shall be identified, segregated where practical and processed per requirements of QMS procedure **QSP 014 Control of Non-Conforming Product**.

Materials stored outside of the store such as Curtain Wall stick work, windows, doors, glass etc. shall be stored in a tidy and responsible manner fully protected

24.4 Waste

CSI's waste control measures comply with the relevant State regulatory requirements, as such site waste, for which CSI is responsible, shall be controlled and or disposed as defined in the Customers on-site procedures.

25. MATERIALS DECANTED FROM SITE

(SITE001F11 Material Returns Note)

25.1 Return of unused Materials and Equipment

When the contract is completed and the site is cleared, it is the responsibility of the project manager to ensure that all usable materials and scrap material are listed on a return note.

When returning materials from site, the project manager shall ensure that the materials being returned are package and protected for secure transportation.

26. Measurement Analysis and Improvement (BS EN ISO 10005)

26.1 Inspection, Measuring and Test Equipment

The calibration controls to be used for test equipment shall be as defined in QMS Procedure [QSP 016 Measuring and Calibration of Equipment](#).

For erection at site, evidence of current calibration status will be examined by CSI prior to commencement of work. No work shall be carried out with un-calibrated testing and measuring equipment where such measurements are required to determine equipment status. The requirement will be subject to audit.

26.2 Inspection and Testing

Inspection and Testing for the project shall be carried out for:

- a) Incoming Goods Inspection;
- b) In Process Inspection;
- c) Final Test and Inspection;
- d) Installation Inspection and Tests

CSI may appoint qualified inspection personnel to carry out inspection or surveillance activities as required.

26.3 Inspection Test Plans

Before commencement of work including site work, Project Manager shall supply ITPs for their scope of work for approval. Guidelines as a minimum and shall form a requirement of the purchase order. All ITPs shall be technically reviewed by the Contract Manager and Quality Manager prior to issue for use. ITP's shall contain at least the following information:

- a) Applicable steps/sequence of activities to effectively control and complete the process;
- b) Verifying procedure to be used and the acceptance criteria for each step/sequence; Responsibility for each inspection or test;
- c) Columns for inspection and test points for CSI, Architect and any other required;
- d) Resultant Records applicable to each step/sequence as applicable;

- e) ITP steps/activities shall be progressively signed off as the relevant inspections and tests are completed and accepted. All pertinent records shall be available prior to signing off an ITP, unless agreed/provided for otherwise (e.g. positive recall provisions for urgent use items);

Notification to CSI shall be given of the timing of Witness points that shall be carried out in accordance with the requirements specified in the Contract.

27. Project Quality System Review

The Quality System is reviewed during regular site meetings which, as well as covering project matters, address:

- a) Any incidents including injuries reported since the last meeting;
- b) Accident figures for area being reviewed;
- c) Any customer complaints reported since the last meeting;
- d) Any audits and corrective actions raised, including their status;
- e) Significant non-conformances and estimated costs;
- f) Performance against objectives set for the area reviewed, and
- g) These meetings are to be minuted and actions identified and followed up by the delegated personnel.

The implementation and review of the management systems are also addressed in project reports, prepared in accordance with the Contract requirements but usually monthly for significant projects. These reports cover system implementation, non-conformances, audits and corrective actions, and incidents. They are prepared for relevant circulation and for review by Project and department Managers.

28. Management Change Requests

All employees are to highlight any issues found within the Quality Management System and raise a management change request to be handed to the quality manager. The request are to be prioritised as Emergency (a critical failure in the management system: for example a Quality Control check has no relevant form) or a Standard management change (a form is badly designed). The Procedure is defined by [QSM 003 Change Management](#), and form [QSM003 Appendix B Change Request Form](#)

29. Audits

Quality Audits shall be performed in accordance with [QMS Procedure QSP 005 Internal Audits](#). These will be internal (and external for subcontracted work) and shall be carried out in accordance with the project audit schedule and as considered necessary. Subcontractors shall detail audit requirements in their Quality Plans and shall provide their own detailed audit schedule covering both internal and external audits on their subcontractors.

29.1 Audit Schedule

An Audit Schedule shall be established and progressively updated at appropriate intervals. Separate schedules shall be developed for internal and external audits. These schedules shall be established on the status and importance of each activity or subcontract and shall be varied according to the adequacy of the results. Follow-up audits may be performed where Corrective Action Requests (CARs) have been issued.

29.2 Audits

Audits may be carried out by the Quality Manager, or may be delegated to other appropriately qualified independent personnel as necessary. CARs raised during the audits shall be processed and followed up in accordance with **QMS Procedure QSP 005 Internal Audits**. CARs shall only be closed out after corrective actions have been verified and accepted. Audit records shall be maintained by the Quality Manager and distributed, as a minimum to:

- a) Director Project Management
- b) Project Manager
- c) Project Safety/Quality Officer
- d) Auditee(s) - Internal or external.

30. Environmental Policy

CSI shall ensure that operation and processes completed in the contract will conform to all Regulations and Guidelines regarding the environment. CSI environmental policy is to source the most environmental product capable of completing the contract requirements. CSI shall ensure that all suppliers and sub-contractor are aware of their environmental obligations. Wherever possible CSI will attempt to source suppliers that are compliant to the ISO14001 Standard.

31. Procedures

Below is a list of all CSI procedures used by CSI to complete the contract work as detailed within the PQP

CSI QMS	
Document Control Procedure	QSP 001
Estimating and Contract Initiation Procedure	QSP 002
Customer Feedback	QSP 003
Management Review	QSP 004
Internal Audits	QSP 005
Control of Records Procedure	QSP 006
Corrective & Preventive Action Procedure	QSP 008
Accounts Procedure	QSP 009

Design & Development Procedure	QSP 010
Purchasing Procedure	QSP 011
Raising a Purchase Requisition	QSP 011A
Shipping & Logistics	QSP 012
Production Process	QSP 013
Production Process steel	QSP 013A
Control of Non-Conforming Product	QSP 014
Training & Development Procedure	QSP 015
Calibration & Measuring of Equipment	QSP 016
Communications & Awareness	QSP 017
Traceability & Identification Process Chart	QSP 018
12 month defect & Snagging Procedure	QSP 019
Works order control Procedure	QSP 020
Risk Management Procedure	QSP 021
Goods In & Store Procedure	QSP 022
Appraisal Process	QSP 024
Contracts Procedure	QSP 025

Safety Health & Environment	.
CSI Health & Safety Policy	SHE 001
CSI Environmental Policy	SHE 004
Safe Methods of Working Marfleet Avenue	SHE 003
CSI OHSMS Manual	SHE 005

Incident Reporting & Emergency Planning	SHE 006
Hazard Identification & Controls	SHE 007
Regulation Compliance & awareness	SHE 009
Welding Galvanised Steel	SHE 011
Issuing PPE	SHE 012

Site Procedures	.
Site Procedures Manual	SITE 001

Windows, Doors & Curtain Walling Procedures	.
EN14351, EN 13830 Manual	WDCW 001

Welding QMS	
Welding QMS Summary for Compliance to EN ISO 3834	WQMS
CSI Compliance to BS EN 1090	001/a
Welding Procedure Overview	WQMS
	002
Support procedures sample	WQMS
	003
New Equipment Procedure	WQMS
	004
Prevent the use of Defective Equipment	WQMS
	005
WPS REGISTER & WELD QUALS MATRICES	WQMS
	006

welding tasks and responsibilities	WQMS 007
Equipment List	WQMS 008
Calibration Control	WQMS 009
Visual Inspection Procedure	WQMS 010
Avoidance of Carbon Contamination on Stainless Steel Procedure	WQMS 011
Calibration Control	WQMS 012
CSI INTERNAL HOLING PROCEDURE	WQMS 013
RAMS Bolting Procedure	WQMS 014
Marking Up Incoming Material	WQMS 015
Surface Prep Procedure	WQMS 016
Internal Paint Procedure	WQMS 017
Route Card Control & Data Input Procedure	WQMS 018
Review of Req & Tech Review	WQMS 019
Notching Procedure	WQMS 020
Qualification of welding Procedures	WQMS 021