A N C H O R A G E

BUILDING SAFETY DIVISION

STRUCTURAL STEEL
FABRICATOR APPROVAL PROGRAM

January 15, 2008

TABLE OF CONTENTS

1.0 SCOPE and APPLICABILITY

Every fabricator who supplies shop fabricated steel and/or steel assemblies on a structure to be built within the Municipality of Anchorage must use one of the following inspection procedures : have a current American Institute of Steel Construction (AISC) or International Code Council (ICC) certification; or have Special Inspections performed in the shop in accordance with Chapter 17 of the IBC.; or be approved and registered with Building Safety through this audit program,

This document describes a program by which Alaskan fabricators that regularly engage in the process of fabricating structural steel can become an approved fabricator as defined by Chapter 17 of the International Building Code (IBC) as amended by the Municipality of Anchorage

Approval will depend primarily on a successful audit of the fabricator's Quality Control program. This audit will encompass all aspects of quality control as it relates to supplying a finished product that meets the requirements of the project documents and the IBC.

2.0 APPLICATION

In order to gain approval status, fabricators without either AISC or ICC certification must have their QC program audited by an approved Steel Fabrication Auditor in accordance with this program. At the completion of the audit, the fabricator must fill out an application and attach a copy of the Auditor's check-list and the final report signed by the Steel Fabrication Auditor.

After review and approval by Municipal Building Safety, the steel fabricator will be issued a registration number and provided with a Letter of Approval.

3.0 EFFECTIVE PERIOD

Letters of Approval for fabricators participating in the steel fabrication audit program, shall remain in effect for a period not to exceed three years, contingent on successful interim audits performed by an approved Steel Fabrication Auditor and continued good standing with Building Safety.

At the end of three years fabricators must re-apply and submit their completed third year interim audit check–list along with their application.

4.0 REVOCATION OF FABRICATOR'S APPROVAL STATUS

Building Safety reserves the right to remove any fabricator from approval status based on evidence of non-conforming work or evidence that the fabricator's QC program has become deficient. . If the approval of any company is so cancelled or revoked, approval as a steel fabricator shall not be granted to such company within twelve (12) months after the date of such cancellation or revocation. Any action may be appealed to the Board of Building Regulation Examiners and Appeals (Building Board).

Evidence from the field or shop shall be documented, detailing non-conforming items.

Questions concerning non-conforming fabricated steel will be addressed as follows:

> Building Safety and the fabricator will meet together and address the non-conforming items and their remedy. If non-conforming, shop-fabricated items were found at a job site, timely repair will be the immediate concern. Deficiencies in the fabricator's QC program found by either non-conforming shop-fabricated items in the field, or by an interim audit, will require the deficiencies to be identified, documented in writing, and brought to the attention of both the fabricator and Building Safety before the meeting. After the meeting the fabricator shall submit to Building Safety a detailed written plan for correcting any deficiencies, including a time line for correction. Building Safety may then either revoke approval status or allow it to continue contingent on prescribed actions to be taken.

If approval status is revoked, a fabricator must go through the approval application process as described under section 2.0 APPLICATION to regain approval status.

5.0 AUDITOR'S EXPERIENCE and QUALIFICATIONS

Steel Fabrication Auditors must be approved by Building Safety to do Special Inspection for Welding and High Strength Bolting. In addition they must hold current certification as an AWS Certified welding inspector, certified to the AWC QC-1 standard. In addition they must have no less than 12 months experience in a fabricators shop inspecting fabricated structural steel components as a quality assurance inspector working for a project owner or government entity representing the owner or public's interests.

Building Safety shall approve Steel Fabrication Auditors based on documented and verified qualifications and experience. Approval as a Steel Fabrication Auditor will be noted as a special category on Building Safety's Special Inspector approvals

6.0 AUDIT BY STEEL FABRICATION AUDITOR

The audit is an essential element of the quality control program. It assures all parties, the fabricator, the engineer of record, the architect, Building Safety, and the Auditor that the fabricator's quality control program is effective in design and implementation. This assures a finished product that meets all project requirements and complies with industry-prescribed standards.

The audit check-list covers key components and criteria required for a successful QC program. Key components and criteria shall be verified by the Auditor on site and recorded on the check-list form. Upon completion of a successful audit a final report shall be generated and signed by the Auditor.

7.0 AUDIT DEBRIEFING

Upon completion of the audit, the Auditor shall determine whether or not all required criteria have been met. The Auditor shall meet with the fabricator to discuss the audit results.

If all criteria have been met, a final report shall be generated. The final report, completed audit, and fabricator's application can then be submitted to Building Safety for review.

If any of the criteria has not been met, the discrepancies shall be clearly identified, recorded and shared with the fabricator. If the fabricator chooses to proceed, he shall provide the Auditor a written plan for correcting the deficiencies. Once the deficiencies have been corrected by the fabricator and verified by the Auditor, the Auditor can write a final report.

8.0 INTERIM AUDITS

Fabricators that have been approved by Building Safety based on audits are required to have interim audits at least once every six months for the first year and every year thereafter. Before the end of the third year and after successful completion of the third year interim audit, the fabricator may reapply for approval status. Renewing fabricators shall continue to have interim audits performed on a yearly basis. All required interim audits shall be forwarded to Building Safety to the attention of the Chief of Inspections. As much as possible interim audits should be performed by the original Steel Fabrication Auditor. Interim audits will consist of, but not be limited to, gathering information pertaining to any significant changes within the QC program itself, such as change of ownership, change of address, personnel change and any significant procedural changes that could adversely affect the quality of the product being manufactured. The following verifications shall also be made:

1. Verify continued document control of welder's qualifications and welding procedures.
2. Verify material test reports of supplied material.
3. Verify material storage, both consumable and structural steel.
4. Verify that in-house QC teams are still experienced for the positions held, and that each QC person is performing his or her tasks sufficiently enough to capture non-conformance items on the floor during fabrication.
5. Verify that the most conformed set of drawings are being used during fabrication, and that all who need them have access to them.
6. Verify that any change orders or deviations from the approved set of conformed drawings are being addressed appropriately.
7. Verify that all parties involved are getting sufficient information on a timely basis; i.e. engineer of record.
8. Verify that the welding procedures being used are applicable to the welding being performed and that only qualified welders are being used.
9. Verify weld sizes, dimensions and quality of completed welds.

APPLICATION FOR FABRICATOR APPROVAL (ALASKA)

New Application _____ or Renewal _____ Date _____
Registration Number if this is a renewal _____

1. Name of Business: (as it appears on your business license/Contractors license)

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2. Address:

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3. Contact Names: (Must be an authorized officer or owner of the company)

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4. Contact Phone Numbers and E-mail address:

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5. State Contractor's/Business License Number:

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6. Attach a copy of your current State Business/Contractors License.

7. Attach a copy of the completed Auditor's check-list along with the signed final report.

I, We, CERTIFY and AGREE as a condition of final approval, to comply with all requirements, rules and regulations of all Municipal Building Codes which apply to the activities mentioned in this application.

I, We, CERTIFY that the above information is true and complete to the best of my knowledge. I, we, understand that any false and/or misleading information may result in failure to obtain Fabricator Approval.

_____	_____	_____
OWNER'S PRINTED NAME	OWNER'S SIGNATURE	DATE

AUDIT CHECK-LIST

1. POLICY
    a. Is there a written policy statement adequately describing the Company's policies, goals and commitment to quality.

    b. If so, where is it kept?

2. QUALITY CONTROL MANUAL
    a. Is there a formal Quality Control manual in place?

    b. Is it current? When was the last time it was revised and for what reason was it revised? Is it relevant to the internal processes that are in place today?

    c. Does the QC manual have an organizational chart showing a clear chain of command and does it delineate between production and quality control?

    d. Does the QC manual indicate who ultimately has overall responsibility for overseeing implementation of the program, i.e. the owner or president or an officer of the corporation, or someone who has an interest in the company who can make an executive decision?

    e. Does the QC Manual indicate the person who is responsible for implementation of the program, i.e. QC manager?

    f. Does the QC manager have the authority and support of management/administration to make changes to the program? Carry out directives of the program if need be?

    g. What are the duties and responsibilities of the QC manager?

    h. What are management's responsibilities for documentation requirements? For quality control?

    i. Are people adequately trained and knowledgeable for their respective QC positions? What training, education and/or experience have been documented for these quality control positions? Is it sufficient enough for the assigned tasks and duties assigned to each QC position?

    j. Does the quality Control Plan detail specific tasks and duties for each QC position?

    k. What documentation is required to verify and track QC functions and checks? How is it controlled? How is it distributed? What forms are used?

l. Does the documentation adequately address the control, verification and checks as they pertain to:

1. Welding procedures and how they are selected for each job and whether or not they are applicable to the welding to be performed as specified by the client?

2. Welder's performance qualifications and their applicability to the welding to be or being performed.

3. Welder's performance qualification continuity records?

4. Record keeping of Material Test reports and manufacturer's certification statements as they pertain to consumables and base metals per shipment, per job?

5. Are such records readily accessible to those authorized to review them?

6. Are consumables stored as recommended by the manufacturer?

7. How are consumables controlled; i.e. two jobs going at once with job specs requiring different consumables for each job? How are the consumables controlled on the floor so that each job gets what is specified?

8. Does the program address the control of base metal to be used in construction on a per job basis? Are there procedures in place in which the fabricator can control the different base metals stored on site, so that each job gets the specified steel required?

9. Are contract reviews performed by QC personnel prior to the start of a job to ascertain the specified inspection and testing as well as what acceptance standards to use?

10. Does the program address specific frequency of visual inspection? And/or other non-destructive testing required?

11. Does the program address who within the department can perform the specified inspections and/or tests?

12. If an outside independent 3rd party inspector and/or tester is selected for the performance of certain inspection and/or tests, how does the QC program address verifying the inspector's and/or tester's qualifications and/or inspection and testing procedures?

13. If an outside independent 3rd party inspector and/or tester is selected to perform certain inspections and tests on behalf of the fabricator, how are directives provided so that inspectors and testers know what to? Inspect and/or test?

14. How is the documentation of such inspections and tests controlled and distributed?

15. Does the QC manual address how non-conformance items are tracked, identified, and documented, either by the 3rd party inspection and testing company hired by the fabricator, or by the in-house quality control team?

16. Pertaining to the previous question above, how is a non-conformance item brought into conformance? Is the production team notified immediately so that corrective action might take place in a timely matter so as to reduce overall production costs?

17. After corrective action has taken place and a non-conformance item has been brought into conformance, how is this documented, addressed, or closed out; i.e. punch list showing the date that the item was put into open status and the date showing when it was corrected and put into a "closed status."

18. Does the QC manual address the review of shop drawings for conformance with contract drawings? If so how are the reviews tracked and documented?

19. Pertaining to the previous question above, if a discrepancy is identified between the shop drawings and the contract drawings, are they identified and documented?

20. Pertaining to the previous question above, how is the discrepancy brought to the engineer of record? Is there a vehicle in place such as a DCVR (design clarification verification request)? If so, how is it generated and submitted to the engineer; i.e. is it submitted to the General Contractor then to the design engineer?

21. How does the QC manual address change orders? Are change orders tracked and documented? Are they approved by the appropriate client and/or governing jurisdiction?

22. Are shop drawings approved by the design engineer?

23. If shop drawings have revisions called out by the engineer of record after review; how do these revisions get incorporated into a

new set of shop drawings? Or are they red-lined on the original submittal?

24. Pertaining to the previous question above, how are these revised drawings controlled and distributed; i.e. is there just one set of red-lines kept in an office that everybody works off of? Or are copies made and distributed to all who need them such as the welder/fabricator and QC team?

25. Are the key personnel on the production side as well as the quality control side conversant with the latest current provisions of the pertinent applicable industry standard being used, such as AWS D1.1, AWS D1.4, IBC, ASME, API, ASNT, AISC, AWWA, AASHTO, etc?

26. Does the QC manual have provisions for surface prep and coatings as they pertain to High Strength Bolted connections; i.e. are faying surfaces that are to be incorporated into a slip critical connection during erection prepped accordingly? If so how is this documented/tracked?

27. Does the QC manual have provisions for suitable material handling and storage before and after production and during shipping?

28. Does the QC manual contain provisions addressing the receiving, storage and shipping of High Strength Bolted assemblies if the fabricator is the supplier of such said bolts?

29. Pertaining to the previous question above, how are material test reports processed? Are lot numbers visible on all shipping containers?

30. Are there provisions within the QC manual that address in-house internal audits? How often are they to be conducted? Are the internal audits documented? How are non-conformance items addressed? Is there a provision for dealing with a non-conformance item?