



BECKER
STRUCTURAL ENGINEERS

Structural Special Inspections Report

Seaside Rehab Room Addition

Portland, Maine

June 16, 2015

Report Prepared by:

Structural Engineer of Record
Becker Structural Engineers, Inc.
75 York Street
Portland, ME 04101
207. 879. 1838

Seaside Rehab Room Addition

Portland, Maine
June 16, 2015

Structural Engineer of Record

Becker Structural Engineers
75 York Street
Portland, ME 04101
207.879.1838

Owner

First Atlantic Corporation
100 Waterman Drive
South Portland, ME 04106
207.874.2700

Architect of Record

Forside Architects
5 Fundy Road
Falmouth, ME 04105
207.781.3344

Contractor

Ledgewood Construction
27 Main Street
South Portland, ME 04106
207.767.1866



Seaside Rehab Room Addition

Portland, Maine

June 16, 2015

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Special Inspections - Section A

Statement of Special Inspections
List of Agents
Final Report of Special Inspections



Project: Seaside Rehab Room Addition
Date Prepared: October 30, 2014

Structural Statement of Special Inspections

Project: SEASIDE REHAB ROOM ADDITION

Location: Portland, Maine

Owner: First Atlantic Corporation

This Statement of Special Inspections encompass the following discipline: **Structural**

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Structural Special Inspection Coordinator (SSIC) and the identity of other approved agencies to be retained for conducting these inspections and tests.

The Structural Special Inspection Coordinator shall keep records of all Structural inspections and shall furnish inspection reports to the Building Code Official (BCO) and the Structural Registered Design Professional in Responsible Charge (SRDP). Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Structural Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Structural Registered Design Professional in Responsible Charge at an interval determined by the SSIC and the BCO.

A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted to the BCO prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: Upon request of Building Official _____ or per attached schedule.

Prepared by:

Christopher Williams, S.E.
(type or print name of the Structural Registered Design Professional in Responsible Charge)



Chp R Wm 6/16/15
Signature Date

Owner's Authorization:
[Signature]
Signature Date

Building Code Official's Acceptance:

Signature Date

Project: *Seaside Rehab Room Addition*
 Date Prepared: *October 30, 2014*

Structural Statement of Special Inspections (Continued)

List of Agents

Project: *SEASIDE REHAB ROOM ADDITION*

Location: *Portland, Maine*

Owner: *First Atlantic Corporation*

This Statement of Special Inspections encompass the following discipline: **Structural**

(Note: Statement of Special Inspections for other disciplines may be included under a separate cover)

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- Soils and Foundations
- Cast-in-Place Concrete
- Precast Concrete System
- Structural Masonry Systems
- Structural Steel
- Wood Construction
- Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)	<i>Becker Structural Engineers, Inc. Christopher Williams, S.E.</i>	<i>75 York Street Portland, Maine 04101 (207) 879-1838 CWilliams@beckerstructural.com</i>
2. Special Inspector (SI 1)	<i>Becker Structural Engineer, Inc Christopher Williams, S.E.</i>	<i>75 York Street Portland, Maine 04101 (207) 879-1838 CWilliams@beckerstructural.com</i>
3. Special Inspector (SI 2)	<i>Becker Structural Engineer, Inc Patrick Horrigan, E.I.</i>	<i>75 York Street Portland, Maine 04101 (207) 879-1838 Patrick@beckerstructural.com</i>
4. Testing Agency (TA 1)	<i>Not Applicable</i>	
5. Testing Agency (TA 2)		
6. Other (O1)		

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Project: *Seaside Rehab Room Addition*
Date Prepared: *October 30, 2014*

Structural Statement of Special Inspections (Continued)

Final Report of Special Inspections (SSIC/SI 1)

[To be completed by the Structural Special Inspections Coordinator (SSIC/SI 1). Note that all Agent's Final Reports must be received prior to issuance.]

Project: *SEASIDE REHAB ROOM ADDITION*

Location: *Portland, Maine*

Owner: *First Atlantic Corporation*

Owner's Address: *100 Waterman Drive
South Portland, Maine 04106*

Architect of Record: *Mark Burnes* *Foreside Architects*
(name) (firm)

Structural Registered Design
Professional in Responsible Charge: *Christopher Williams, S.E.* *Becker Structural Engineers, Inc.*
(name) (firm)

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

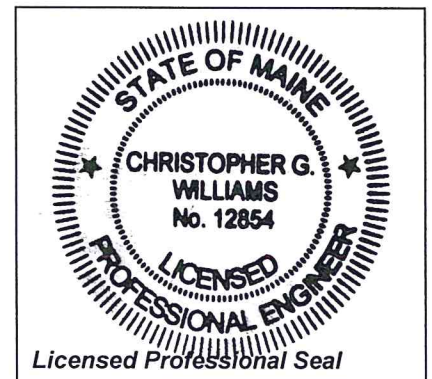
Respectfully submitted,
Structural Special Inspection Coordinator

Christopher G. Williams, S.E.
(Type or print name)

Becker Structural Engineers, Inc.
(Firm Name)

Chf G W
Signature

6/16/15
Date



Special Inspections - Section B

Qualifications of Inspectors
Schedule of Structural Special Inspections
Reports and Certifications



Structural Schedule of Special Inspections

Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided to the Special Inspector for their records. *NOTE VERIFICATION THAT QUALIFIED INDIVIDUALS ARE AVAILABLE TO PERFORM STIPULATED TESTING AND/OR INSPECTION SHOULD BE PROVIDED PRIOR TO SUBMITTING STATEMENT. AGENT QUALIFICATIONS IN SCHEDULE ARE SUGGESTIONS ONLY; FINAL QUALIFICATIONS ARE SUBJECT TO THE DISCRETION OF THE REGISTERED DESIGN PROFESSIONAL PREPARING THE SCHEDULE.*

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge or Special Inspector of Record deems it appropriate that the individual performing a stipulated test or inspection have a specific certification, license or experience as indicated below, such requirement shall be listed below and shall be clearly identified within the schedule under the Agent Qualification Designation.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

Experienced Testing Technician

ETT	Experienced Testing Technician – An Experienced Testing Technician with a minimum 5 years experience with the stipulated test or inspection
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American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.
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International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

Other

Special Inspections - Section B

05120 Structural Steel



Structural Schedule of Special Inspections

STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
IBC Section 1704.3						
1. Material verification of high-strength bolts, nuts and washers:						
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Y	P	Applicable ASTM material standards, AISC 360, A3.3	SII	AWS/AISC-SSI	Jan 2015 – March 2015
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT	Jan 2015 – March 2015
2. Inspection of high-strength bolting						
a. Snug-tight joints.	Y	P		SII	AWS/AISC-SSI	Jan 2015 – March 2015
b. Pretensioned and slip-critical joints using turn-of-nut with matchmaking, twist-off bolt or direct tension indicator methods of installation.	N	P	AISC LRFD Section M2.5 IBC Sect 1704.3.3	TAI	AWS/AISC-SSI	
c. Pretensioned and slip-critical joints using turn-of-nut without matchmaking or calibrated wrench methods of installation.	N	C		TAI	AWS/AISC-SSI	
3. Material verification of structural steel:						
a. For structural steel, identification markings to conform to AISC 360.	Y	P	AISC 360, M5.5	SII	PE/SE or EIT	Jan 2015 – March 2015
b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.	Y	P	Applicable ASTM material standards	SII	PE/SE or EIT	Jan 2015 – March 2015
c. Manufacturer's certified test reports.	Y	S		SII	PE/SE or EIT	Jan 2015 – March 2015
4. Material verification of weld filler materials:						
a. Identification markings to conform to AWS specification in the approved construction documents.	N	P	AISC 360, M5.5	TAI	AWS/AISC-SSI	
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT	Jan 2015 – March 2015
5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.	Y	S	AWS D1.1	SII	PE/SE or EIT	See Note 1
6. Inspection of welding (IBC 1704.3.1):						
a. Structural steel :						
1) Complete & partial joint penetration groove welds.	N	C	AWS D1.1	TAI	AWS-CWI	
2) Multipass fillet welds.	N	C		TAI	AWS-CWI	
3) Single-pass fillet welds > 5/16"	N	C		TAI	AWS-CWI	
4) Plug and slot welds	N	C		TAI	AWS-CWI	
5) Single-pass fillet welds ≤ 5/16"	Y	P		SII	AWS-CWI	See Note 1
6) Floor and deck welds.	N	P	AWS D1.3	TAI	AWS-CWI	
7. Inspection of steel frame joint details for compliance (IBC Sect 1704.3.2) with approved construction documents:						
a. Details such as bracing and stiffening.	Y	P	IBC 1704.3.2	SII	PE/SE or EIT	Jan 2015 – March 2015
b. Member locations.	Y	P		SII	PE/SE or EIT	Jan 2015 – March 2015
c. Application of joint details at each connection.	Y	P		SII	PE/SE or EIT	Jan 2015 – March 2015
8. Inspection of steel decking, including type, gauge, depth, width, laps, welds, sidelaps and placement for compliance with approved construction documents.	N	P	IBC 1704.3.2	TAI	PE/SE or EIT	
9. Testing and Inspection of shear stud connectors for compliance with construction documents. Verify size, number and spacing of shear connectors for compliance with approved construction documents.	N	P	Spec. 051200	TAI	PE/SE or EIT	

Project: Seaside Rehab Room Addition
 Date Prepared: October 30, 2014

FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL

VERIFICATION AND INSPECTION IBC Section 1704.2	REQD Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
1. Fabrications Procedures: Review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents. -OR- 2. AISC Certification	Y	S	Fabricator shall submit one of the two qualifications	SII	PE/SE or EIT	Jan 2015 – May 2015
3. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building code official stating that the work was performed in accordance with the approved construction documents.	Y	S	IBC 1704.2.2	SII	PE/SE or EIT	May 2015

Note 1: Field inspection not required due to minimal amount of structural field welding.

OBSERVATION REPORT
Structural Steel

Date:	01/30/15
Time:	10:00 A.M.
Temp:	20
Weather:	Snow

Project:	Seaside Rehab Room Add'n
Location:	Portland, ME
Becker Job No:	3286

Observation Location:
 The structural steel for the roof framing of the rehab room addition was observed. The existing structure that supported the previous aquarium tank that is to be replaced was also observed.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grout/Leveling Plates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fit Up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Aquarium support structure (see below)

Notes:

The structural steel was mostly complete at the time of our visit. There were some fit-up issues with the ridge beam to existing roof beam connection. The connection plate that had been fabricated did not match the bolt layout of the existing connection. So, it was decided that a new plate would be ordered and this connection would be finished at a later date.

The existing steel conditions for the aquarium support structure were also looked at. There were three existing W8 beams observed that supported the original tank. It was determined that one of the existing beams can be used to support the new tank. Associated detailing for the existing beam that will be utilized will follow this report.

Signed: Patrick Horrigan, E.I.

OBSERVATION REPORT
Light Gauge Metal Framing

Date:	03/11/15
Time:	10:00 A.M.
Temp:	45
Weather:	Sunny

Project:	Seaside Rehab Room Addition
Location:	Portland, ME
Becker Job No:	3286

Observation Location: The light gauge metal framing at the rehab room addition was observed.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Spacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anchorage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temp Bracing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Perm Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Below
Sheathing Attachment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Size of Members	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

The light gauge metal framing was mostly complete at the time of inspection. The bracing for the existing beam shown in section 2 on S1 was not done, and the blocking between rafters at the outriggers was in progress. The rafter-ridge beam connection was observed to be different than what is shown in sections 1 and 2 on S1. After review, it was determined that the observed connection is adequate, but it is recommended that blocking be added between two bays of rafters (at third points along the ridge beam).

Signed: Patrick Horrigan, E.I.

OBSERVATION REPORT
Structural Steel

Date:	03/11/15
Time:	10:00 A.M.
Temp:	45
Weather:	Sunny

Project:	Seaside Rehab Room Addition
Location:	Portland, ME
Becker Job No:	3286

Observation Location:
The structural steel for the aquarium tank was observed.

	Satisfactory	Un-Satisfactory	Not Completed	Not Applicable	Comments
Bolt Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Anchor Bolts, Nuts, & Washers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grout/Leveling Plates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fit Up/Plumbness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Metal Deck Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pour Stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Items	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Infill Joists (See Below)

Notes:

The structural steel had been installed and was acceptable, but the wood infill framing did not match what was shown on SKS1/SKS2. The infill joists were framed differently than what the drawings show, which causes an inadequate connection between the existing steel beam and the infill joists. The new infill joists were attached to a ledger, which in turn was nailed to the top plate of the existing beam (see photo #1). The framing should have been installed in the opposite direction so that it framed into web blocking in the new beams. The current configuration of the ledger at the existing beam is not adequate. To prevent the installed framing from having to be removed entirely, blocking should be installed from the top of the grade beam tight to the bottom of the infill joists. Also, the ledger that supports these infill joists should be fastened to the existing beam top plate with a minimum of #8 wood screws @ 3"O.C. Please see SKS5 for more information.

Signed: Patrick Horrigan, E.I.



Photo # 1 -Infill joists running the wrong direction and ledger inadequately fastened to existing beam.



ACTUAL CHEMISTRY

Date: 4/29/2015

Product Number: S6-035X44

Description: ER70S-6 .035 x 44# Spool LW Maine Oxy Brand

Batch/Heat #: WB13094445

Specification: AWS A5.18/ASME SFA 5.18 ER70S-6

Country of Origin: China

Chemical Composition

Carbon (C)	0.0600	Nickel (Ni)	0.0090
Chromium (Cr)	0.0230	Phosphorus (P)	0.0140
Copper (Cu)	0.0080	Silicon (Si)	0.8900
Manganese (Mn)	1.4800	Sulfur (S)	0.0080

Weldcote Metals certifies that the above chemical test results are correct and conforms to the AWS/ASME specifications stated as contained in the records of the company. This document represents the **actual** attributes of the product.


Signature

ISO 9001, ISO/TS16949
ISO / IEC 17025
ISO 14001

FASTENER TEST REPORT

(THIS DOCUMENT MAY ONLY BE REPRODUCED IN ITS ENTIRETY, WITH PRIOR WRITTEN APPROVAL BY THE INFASCO LABORATORY)

(THE INFASCO LABORATORY IS ACCREDITED BY THE CCN FOR THE TESTS LISTED AT WWW.CCN.CA)

COMPLIES WITH EN10204:2004 INSPECTION CERTIFICATE 3.1

DATE: 2014-12-11

DESCRIPTION	C A325-1+A563-C NA UNC N 3/4-10 X 2 1/4
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BOLT A325-1 STRUCTURAL BOLT UNC N P
MARKING : HOLLOW TRIANGLE & "A325"

LOT NO. 1410-60870	MANUFACTURED BY INFASCO			HARDNESS (ROCKWELL) HRC 29.0 - HRC 34.0		PROOF LOAD (LBS) MIN: 28,400	TENSILE STRENGTH (LBS) MIN: 40,100	
MEAN VALUE				28.8		PASS	47,233	
HEAT NO.	C %	Mn %	P %	S %	SI %			
A17625	0.36	0.92	0.008	0.015	0.18			

NUT HVY HEX NUT A563-C FNA UNC N P
MARKING : TRIANGLE & 3 CIRCUMFERENTIAL LINES

LOT NO. 1406-56134	MANUFACTURED BY INFASCO			HARDNESS (ROCKWELL) HRBW 78.0 - HRC 38.0		PROOF LOAD (LBS) MIN: 48,100		
MEAN VALUE				89.6		PASS		
HEAT NO.	C %	Mn %	P %	S %	SI %	Cu %	NI %	
C110217	0.46	0.81	0.005	0.017	0.23	0.05	0.03	

HEAT CHEMICAL ANALYSIS PROVIDED BY STEEL SUPPLIER.

Réjean Sévigny

INFASCO
A division of thetgroup LP 700 Quélotte, Mariville (Quebec) J3M 1P8
A Hico Company Tel.: (450) 658-8741 Fax: (450) 660-0496

Réjean Sévigny, eng.
ISO Coordinator

FASTWELL INDUSTRY CO., LTD.

HEAD OFFICE :6TH FLOOR,NO.227,SEC.1, FU-SHENG S.RD., TAIPEI ,TAIPEDI,TAIWAN
 SHANGHAI OFFICE:SUITE A,11F,HAILI BUIL DING ,NO.88 DAPU ROAD. SHANGHAI CHINA ZIP CODE :200023

CERTIFICATE OF INSPECTION

REPORT NO.:	20110701001	HEAT NO.:	60510B1745
INSP. DATE:	2011.07.01	LOT. NO.:	190440802
CUSTOMER:	INPASCO	MATERIALS:	45#
INVOICE NO.:	201107019	P.O.NO.:	218408
DESCRIPTION:	HARDENED STEEL ROUND WASHER ASTM F436	PART NO.:	WKK00-48000001V
SIZE:	3/4" FLAIN	LOT QUANTITY:	80.000MPCS

1.0 MATERIAL:

CHEMICAL COMPOSITION			PHYSICAL CHARACTERISTIC	
SPECIFICATION	STANDARD	RESULTS		
Carbon	0.35 min.	0.440	YIELD LOAD(Mpa)	/
Manganese		0.670		
Phosphorus	0.04 max.	0.017		
Sulfur	0.05 max.	0.018	TENSILE STRENGTH (Mpa)	/
Silicon	0.15 min.	0.210		
Chromium		0.060		
Nickel		0.030	ELONGATION(%)	/
Copper		0.120		
Plumb				
Vanadium			REDUCTION(%)	/
Aluminium				

* ABOVE DATA COME FROM ORIGINAL TESTING RESULT.

2.0 DIMENSIONS

TEST ITEM	SPECIFICATION	INSPECTION RESULTS	SAMPLING	AC	RE
APPEARANCE	ASTM F812	OK	100PCS	100	0
INSIDE DIAMETERS	0.812 - 0.843	0.822 - 0.831	8PCS	8	0
OUTSIDE DIAMETERS	1.437 - 1.500	1.451 - 1.465	8PCS	8	0
THICKNESS	0.122 - 0.177	0.131 - 0.145	8PCS	8	0
HARDNESS(HRC)	38 - 45	OK	8PCS	8	0

* ABOVE DATA IS ACCORDING TO ACTUAL TEST.

REMARK: 1. MATERIAL USED TO MANUFACTURE THESE PRODUCTS IS ASBESTOS MERCURY AND RADIOACTIVITY FREE!

QC. MANAGER

JIN

DATE

2011.07.01

15314
 Atlas Tube Canada ULC
 200 Clark St.
 Harrow, Ontario, Canada
 NOR 1G0
 Tel: 519-738-3541
 Fax: 519-738-3537



Ref./L: 80829485
 Date: 10.10.2014
 Customer: 7392

MATERIAL TEST REPORT

Sold to

Presby Steel LLC
 143 East Milan Road
 BERLIN NH 03570
 USA

Shipped to

Presby Steel LLC
 143 East Milan Road
 BERLIN NH 03570
 USA

Material: 3.0x3.0x250x48'0"0(8x2).

Material No: 300302504800

Made in: Canada
 Melted in: Canada

Sales order: 948382

Purchase Order: 8611

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V	Ti	B	N
773740	0.200	0.840	0.014	0.009	0.013	0.035	0.044	0.008	0.005	0.018	0.049	0.002	0.002	0.000	0.004

Bundle No	PCs	Yield	Tensile	Eln.2In	Certification	CE: 0.36
M101392936	12	074780 Psi	082710 Psi	23.3 %	ASTM A500-13 GRADE B&C	

Material Note:
 Sales Or.Note:

Material: 4.0x4.0x250x24'0"0(5x4).

Material No: 400402502400

Made in: Canada
 Melted in: Canada

Sales order: 948382

Purchase Order: 8611

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V	Ti	B	N
771787	0.200	0.790	0.013	0.008	0.015	0.041	0.023	0.004	0.003	0.010	0.045	0.002	0.002	0.000	0.004

Bundle No	PCs	Yield	Tensile	Eln.2In	Certification	CE: 0.36
M101390143	20	067150 Psi	076150 Psi	30.0 %	ASTM A500-13 GRADE B&C	

Material Note:
 Sales Or.Note:

Material: 4.0x4.0x250x48'0"0(6x2).

Material No: 400402504800

Made in: Canada
 Melted in: Canada

Sales order: 948382

Purchase Order: 8611

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V	Ti	B	N
818866	0.190	0.800	0.008	0.007	0.012	0.042	0.042	0.006	0.003	0.014	0.037	0.002	0.002	0.000	0.003

Bundle No	PCs	Yield	Tensile	Eln.2In	Certification	CE: 0.34
M101390219	10	068220 Psi	080070 Psi	31.5 %	ASTM A500-13 GRADE B&C	

Material Note:
 Sales Or.Note:

Marvin Phillips

Marvin Phillips

Authorized by Quality Assurance:
 The results reported on this report represent the actual attributes of the material furnished and indicate full compliance with all applicable specification and contract requirements.
 CE calculated using the AWS D1.1 method.



Atlas Tube Canada ULC
 200 Clark St.
 Harrow, Ontario, Canada
 NOR 1G0
 Tel: 519-738-3541
 Fax: 519-738-3537



Ref.B/L: 80613138
 Date: 07.24.2014
 Customer: 7392

TS 314
MATERIAL TEST REPORT

Sold to

Presby Steel LLC
 143 East Milan Road
 BERLIN NH 03570
 USA

Shipped to

Presby Steel LLC
 143 East Milan Road
 BERLIN NH 03570
 USA

Material: 3.0x3.0x250x24'0"(8x5).-D

Material No: 0300302602400-D

Made in: USA
 Melted in: USA

Sales order: 926235

Purchase Order: 008458

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V	Ti	B	N
EB3528	0.180	0.800	0.013	0.011	0.018	0.042	0.020	0.001	0.005	0.010	0.020	0.001	0.001	0.000	0.006

Bundle No	PCs	Yield	Tensile	Elm.2ln	Certification	CE: 0.32
M300778948	26	062633 Psi	068303 Psi	90.3 %	ASTM A500-13 GRADE B&C	

Material Note:
 Sales Or.Note:

Handwritten signature

Authorized by Quality Assurance:
 The results reported on this report represent the actual attributes of the material furnished and indicate full compliance with all applicable specification and contract requirements.
 Computed under the AWS D1.1 method.



W810



URM-CARTERSVILLE
384 OLD GRASSDALE ROAD NE
CARTERSVILLE, GA 30121
USA

CERTIFIED MATERIAL TEST REPORT

CUSTOMER SHIP TO	CUSTOMER BILL TO	GRADE	SHAPE / SIZE
		A992A572-50	Wide Flange Beam / 8 X 108
SALES ORDER	CUSTOMER MATERIAL N°	LENGTH	WEIGHT
109518000010	CULD TO CHANGE TO RAL	40000	24,000 LB
		SPECIFICATION / DATE OF REVISION	HEAT / BATCH
		1-A992A572-50-11	350386703
CUSTOMER PURCHASE ORDER NUMBER	DATE	1-A992A572-50-11	
6648	07/11/2014	1-A992A572-50-11	
		1-A992A572-50-11	
		1-A992A572-50-11	

MECHANICAL PROPERTIES	Y	N	Y	N	Y	N	Y	N
YIELD STRENGTH	MPa	ksi	MPa	ksi	MPa	ksi	MPa	ksi
22.40	3240	46.9	6800	22.40	3240	46.9	6800	22.40
TENSILE STRENGTH	MPa	ksi	MPa	ksi	MPa	ksi	MPa	ksi
488	7030	488	7030	488	7030	488	7030	488
ELONGATION	%	%	%	%	%	%	%	%
22.40	22.40	22.40	22.40	22.40	22.40	22.40	22.40	22.40

CHEMICAL COMPOSITION	%	%	%	%	%	%	%	%	
C	0.20	Mn	0.17	P	0.016	S	0.001	N	0.0010
Si	0.20	Al	0.17	Cr	0.016	Cu	0.001	As	0.0010
Fe	0.20	Mo	0.17	Ni	0.016	Co	0.001	Se	0.0010
0.012		0.012		0.012		0.012		0.012	

MECHANICAL PROPERTIES	Y	N	Y	N	Y	N	Y	N
YIELD STRENGTH	MPa	ksi	MPa	ksi	MPa	ksi	MPa	ksi
22.40	3240	46.9	6800	22.40	3240	46.9	6800	22.40
TENSILE STRENGTH	MPa	ksi	MPa	ksi	MPa	ksi	MPa	ksi
488	7030	488	7030	488	7030	488	7030	488
ELONGATION	%	%	%	%	%	%	%	%
22.40	22.40	22.40	22.40	22.40	22.40	22.40	22.40	22.40

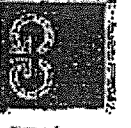
COMMENTS: NOTES

The above figures are certified chemical and physical test records as referenced in the permanent records of company. This material, including the billets, was made and manufactured in the USA. CMTR complies with EN 10204 3.1.

Moskoy QUALITY DIRECTOR

OMASKA VALDANOVICH QUALITY DIRECTOR

U1216



US-ML-CARTERSVILLE
 384 OLD GRASSDALE ROAD NE
 CARTERSVILLE, GA 30121
 USA

CERTIFIED MATERIAL TEST REPORT

CUSTOMER SHIP TO		CUSTOMER BILL TO		GRADE	SHAPE / SIZE
-SS		-SS		A992A572-50	Wide Flange Beam / 12 X 169
SALES ORDER		CUSTOMER MATERIAL N°		LENGTH	WEIGHT
96946/R0080		96946/R0080		4800"	8,960 LB
BILL OF LADING		DATE		SPECIFICATION / DATE OF REVISION	
1373-0000030328		07/12/2014		1-A57M A6A6M-11 2-A57M A6A6M-11 3-A57M A57M-07	
CUSTOMER PURCHASE ORDER NUMBER		CUSTOMER PURCHASE ORDER NUMBER		HEAT / BATCH	
95013025FQW33		95013025FQW33		550352602	

CHEMICAL COMPOSITION		C	Mn	P	S	Si	NI	Cr	Mo	V	Nb	N	PP
%	%	%	%	%	%	%	%	%	%	%	%	%	%
0.08	1.09	0.016	0.020	0.27	0.27	0.10	0.06	0.029	0.027	0.002	0.0100	0.0040	

CHEMICAL COMPOSITION		SP
		0.011

MECHANICAL PROPERTIES		ELONG	YIELD	TENSILE	YIELD	TENSILE
Elong	%	MPa	MPa	MPa	MPa	MPa
23.30		8000	533	60100	417	427
23.20		8090	534	61900		

MECHANICAL PROPERTIES		YS	UTS	YS	UTS
YS	UTS	MPa	MPa	MPa	MPa
0.780		533	534		
0.800		534	534		

COMMENTS / NOTES



The above figures are certified identical and physical test records as contained in the permanent records of company. This material, including the bills, was melted and manufactured in the USA. CHTR complies with EN 10204 3.1.

Markway
 BUSINESS VALUATION
 QUALITY DIRECTOR

Yan Wang
 YAN WANG
 QUALITY ASSURANCE

W1012



CERTIFIED MATERIAL TEST REPORT

US-MIL-CARTERSVILLE
384 OLD GRASSDALE ROAD NE
CARTERSVILLE, GA 30121
USA

CUSTOMER PURCHASE ORDER NUMBER
95012816W14

CUSTOMER SHIP TO	CUSTOMER BILL TO	GRADE	SHAPE / SIZE
		A992/A572-50	Wide Flange Section / 10 X 12
SALES ORDER	CUSTOMER MATERIAL N°	LENGTH	WEIGHT
74726400090		4000'	9,600 LB
BILL OF LADING	DATE	SPECIFICATION / DATE OF REVISION	
1323-0000023490	03/27/14	1-A572/A572M-11 2-A992/A992M-11 3-A572/A572M-07	
		HEAT/BATCH	
		550150703	

CHEMICAL COMPOSITION	C	Mn	P	S	Si	Al	Cr	Ni	Cu	Mo	Nb	Ti	As
%	0.08	0.25	0.015	0.005	0.28	0.029	0.10	0.06	0.029	0.025	0.003	0.0100	0.011

MECHANICAL PROPERTIES	Y _T	R _m	Y _{0.2}	A ₅	Z ₅	Y _{0.2}	R _m	Z ₅
Elong.	8.000	8.000	75.000	52.0	53.0	61.500	42.4	43.5
	22.00	22.00	76.000			63.100		

MECHANICAL PROPERTIES	Y _T	R _m	Y _{0.2}	A ₅	Z ₅	Y _{0.2}	R _m	Z ₅
	0.410	0.410	0.820					

COMMENTS/NOTES

The above figures are certified chemical and physical test records as contained in the permanent records of company. This material, including the plates, was melted and manufactured in the USA. CHTRX complies with EN 10204 3.1.

Mackay
BUREAU VALUANCIAL
QUALITY DIRECTOR

YAN WANG
QUALITY ASSURANCE MGR.



095055254

Special Inspections - Section C

Quality Assurance for Wind Resistance Checklist



Project: Seaside Rehab Room Addition
 Date Prepared: October 30, 2014

WIND RESISTANCE CHECK LIST [IBC 1705.4]

Wind Exposure Category B

REQUIRED	NOT REQUIRED	NOT APPLICABLE	WIND RESISTANCE REQUIREMENTS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In wind exposure Category B, where the 3-second-gust basic wind speed is 120 miles per hour (mph) (52.8 m/sec) or greater.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In wind exposure Categories C and D, where the 3-second-gust basic wind speed is 110 mph (49 m/sec) or greater.

Special Inspections - Section D

Statements of Responsibility



Fabricator's Certificate of Compliance – Exhibit D

Each approved fabricator that is exempt from Special Inspection of shop fabrication and implementation procedures per section 1704.2 of the International Building Code must submit a *Fabricator's Certificate of Compliance* at the completion of fabrication.

Project: **Seaside Rehabilitation & Healthcare Center**

Fabricator's Name: *LINC LIGHT DROW, INC*

Address: *151 RANGE E ROAD LIMERICK ME*

Certification or Approval Agency: *AWS*

Certification Number: *N/A*

Date of Last Audit or Approval: *SEE ATTACHED GUIDELINE*

Description of structural members and assemblies that have been fabricated:

Roof Framing Members at Rehabilitation Room Addition
Floor Framing Members at Aquarium Support

I hereby certify that items described above were fabricated in strict accordance with the approved construction documents.


Signature

5-6-15
Date

PRESIDENT
Title

Attach copies of fabricator's certification or building code evaluation service report and fabricator's quality control manual

LMC Light Iron, Inc.

151 E. Range Road P.O. Box 521 Limerick, Maine 04048

Telephone (207) 793-9957

Fax: (207) 793-3919

May 6, 2015

Becker Engineering
75 York Street
Portland, ME 04101

Re: Seaside Lobby/Rehab Renovations - Portland, ME

Gentlemen:

Even though LMC Light Iron, Inc., does not participate in the AISC Program, we do incorporate and follow their guidelines for detailing and fabrication, along with our welders being A.W.S. certified per D1.1-2000.

All of our material suppliers provide us with the documents that assure full compliance with the specifications for each job.

Our detailing software is based completely on the AISC Manual of Steel Construction written for Auto-Cadd, which generates all of our shop drawings.

Shop drawings used on the shop floor also serve as record keeping for each project. Typically a drawing will note the following information:

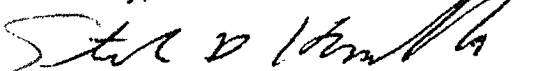
- Date and initials of the person who did the material layout.
- Date and sign-off from Q.C. indicating layout has been checked.
- Date and initials of fabricator showing component is complete.

If welding is required on a fabrication, the weld size and a visual inspection is also done prior to painting and shipping.

Before shipping, a separate shop list is written up using the shop drawings for reference. This allows final review of notes on fabrication prior to shipping. This second ship list is also used to do a piece count during loading.

If you have any further questions, please do not hesitate to call.

Sincerely,



Stephen D. Hamilton
President

DSH/dh

End of Special Inspections Report

