

Project: Building Addition – Portland Sports Complex
Date Prepared: October 1, 2012

Structural Statement of Special Inspections

Project: Building Addition – Portland Sports Complex

Location: 512 Warren Avenue, Portland, Maine

Owner: Portland Sports Complex – Jim Grattello

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

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:



Kenneth A. Wood, P.E. - Design Professional in Responsible Charge



Signature

Date

10/5/2012



Owner's Authorization:

Building Code Official's Acceptance:

Signature

Date

Signature

Date

Structural Statement of Special Inspections (Continued)

List of Agents

Project: Building Addition – Portland Sports Complex

Location: 512 Warren Avenue, Portland, Maine

Owner: Portland Sports Complex – Jim Gratello

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

(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
- Masonry Systems
- Structural Steel
- Wood Construction
- Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. STRUCTURAL Special Inspections Coordinator (SSIC)	Attar Engineering, Inc.	1284 State Rd Eliot, ME 03903 info@attarengineering.com (207) 439-6023
2. Special Inspector (SI 1)	Attar Engineering, Inc. Kenneth A. Wood, P.E. Lewis S. Chamberlain, P.E.	1284 State Rd, Eliot ME 03903 (207) 439-6023
3.		
4.		
5.		
6.		

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: Building Addition – Portland Sports Complex
Date Prepared: October 1, 2012

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 Agents' Final Reports must be received prior to issuance.]

Project: Building Addition – Portland Sports Complex

Location: 512 Warren Avenue, Portland, Maine

Owner: Portland Sports Complex – Jim Granello

Owner's Address: 512 Warren Avenue, Portland, Maine

Architect of Record: N/A

Structural Registered Design Professional in Responsible Charge: Kenneth A. Wood, P.E.

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. See also:

- 1) Certificate of Design – Corle Building Systems
- 2) Envelope Compliance Certificate
- 3) Thermal Design letter dtd July 3, 2012
- 4) Summary of Special Inspections
Attached to this section

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

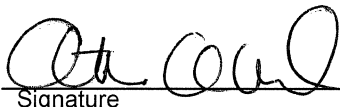
Respectfully submitted,
Structural Special Inspection Coordinator

Kenneth A. Wood, P.E.

(Type or print name)

Attar Engineering, Inc.

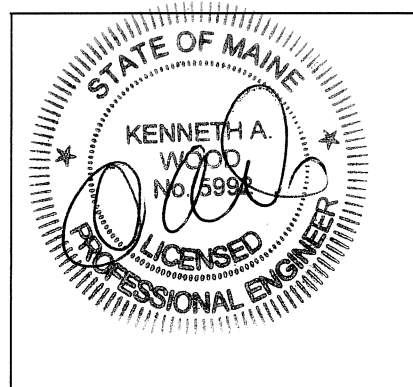
(Firm Name)



Signature

10/5/2012

Date



Licensed Professional Seal

Project: Building Addition – Portland Sports Complex
Date Prepared: October 1, 2012

Structural Statement of Special Inspections (Continued)

Special Inspector's/Agent's Final Report

Project: Building Addition – Portland Sports Complex

Special Inspector or Agent: Kenneth A. Wood, P.E.

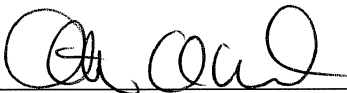
Designation: Agent and Inspector

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

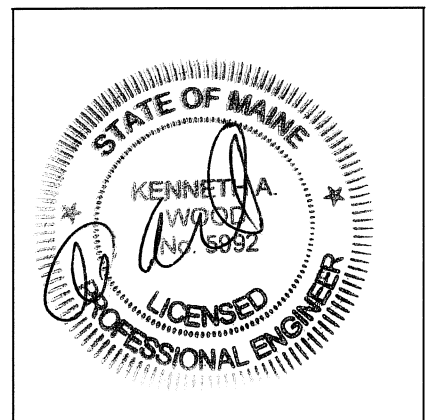
Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted,
Special Inspector or Agent:

KENNETH A. WOOD, P.E.
(Type or print name)


Signature

10/5/2012
Date



Licensed Professional Seal or
Certification Number

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
-----	---

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.
------	---

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

Structural Schedule of Special Inspections - STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	Y/N	EXTENT : CONTINUOUS,	COMMENTS	AGENT	AGENT QUALIFICATION
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	S	AISC 360, Section A3.3 and applicable ASTM material Standards	SII	PE/SE or EIT
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT
2. Inspection of high-strength bolting					
a. Snug-tight joints	Y	P	AISC 360, Section M2.5 IBC 1704.3.3	SII	AWS/AISC-SSI
b. Pretensioned and slip-critical joints using turn-of-nut with matchmarking, twist-off bolt or direct tension indicator methods of installation	NA	P			AWS/AISC-SSI
c. Pretensioned and slip-critical joints using turn-of-nut without matchmarking or calibrated wrench methods of installation	NA	C			AWS/AISC-SSI
3. Material verification of structural steel and cold-formed steel deck.					
a. For structural steel, identification markings to conform to AISC 360	Y	S	AISC 360, Section M5.5	SII	PE/SE or EIT
b. For other steel, identification markings to conform to ASTM standards specified in the approved construction documents.	Y	S	Applicable ASTM material standards	SII	PE/SE or EIT
b. Manufacturers' certified mill test reports.	Y	S	ASTM A 6 or ASTM A 568 IBC Sect 1708.4	SII	PE/SE or EIT
4. Material verification of weld filler materials:					
a. Identification markings to conform to AWS specification in the approved construction documents.	Y	S	AISC 360, Section A3.5 and applicable AWS A5 documents	SII	PE/SE or EIT
b. Manufacturer's certificate of compliance required.	Y	S		SII	PE/SE or EIT
5. Submit current AWS D1.1 welder certificate for all field welders who will be welding on this project.	NA	S	AWS D1.1	SII	PE/SE or EIT
6. Inspection of welding					
a. Structural steel and cold-formed steel deck:					
1) Complete and partial penetration groove welds.	NA	C	AWS D1.1 IBC 1704.3.1		AWS-CWI
2) Multipass fillet welds.	NA	C			AWS-CWI
3) Single-pass fillet welds > 5/16"	NA	C			AWS-CWI
4) Single-pass fillet welds < 5/16"	NA	P	AWS D1.1 IBC 1704.3.1		AWS-CWI

Project: Building Addition – Portland Sports Complex

Date Prepared: October 1, 2012

VERIFICATION AND INSPECTION	Y/N	EXTENT : CONTINUOUS,	COMMENTS	AGENT	AGENT QUALIFICATION
IBC Section 1704.3					
5) Floor and roof deck welds.	NA	P	AWS D1.3		AWS-CWI
b. Reinforcing steel:					
1) Verification of weldability of reinforcing steel other than ASTM A706.	NA	C			
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.	NA	C	AWS D1.4 ACI 318: 3.5.2		AWS-CWI
3) Shear reinforcement.	NA	C			AWS-CWI
4) Other reinforcing steel.	NA	P			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
b. Member locations.	Y	P			PE/SE or EIT
c. Application of joint details at each connection.	Y	P			PE/SE or EIT

Structural Schedule of Special Inspection Services

FABRICATION AND IMPLEMENTATION PROCEDURES – STRUCTURAL STEEL

VERIFICATION AND INSPECTION IBC Section 1704.2	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION
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 -OR- 3. International Accreditation Service's AC472 Certification for Metal Building Systems	Y	S	Fabricator shall submit one of the three qualifications	SII	PE/SE or EIT
4. 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

Structural Schedule of Special Inspections
 SEISMIC RESISTANCE - STRUCTURAL

VERIFICATION AND INSPECTION	Y/N	EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION
IBC Section 1707					
1. Special inspections for seismic resistance. Special inspection as specified in this section is required for the following:			Seismic Design Category: C		
a. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E or F	N	N	IBC 1707.1 – Exempted by Exception of Section 1705.3.1	N/A	PE/SE or EIT
2. Structural steel: Continuous special inspection for structural welding in accordance with AISC 341.	N	N	IBC 1707.2 – Exempted by Exception 1 of Section 1707.2	N/A	AWS-CWI
3. Structural wood:					
a. Continuous special inspection during field gluing operations of elements of the seismic-force-resisting system.	NA	C	IBC 1702.3		PE/SE or EIT
b. Periodic special inspections for nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including drag struts, braces and hold-downs	NA	N	IBC 1702.3		PE/SE or EIT
4. Cold-formed steel framing: Periodic special inspections during welding operations of elements of the seismic-force-resisting system. Periodic special inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-resisting system, including struts, braces, and hold-downs	NA	N			
4. Seismic isolation system. Provide periodic special inspection during the fabrication and installation of isolator units and energy dissipation devices if used as part of the seismic isolation system	NA	N	IBC 1707.8		



114 Rosemont Lane Imler, PA 16655

Certificate of Design

17096 Certificate of Design.ME.doc

Revised 8/17/2009

This Certificate is to confirm that all components of the Steel Building System described below, to be supplied by Corle Building Systems, produced at its Facility at Imler, PA, have been or will be designed in accordance with the following standards, loads, and design criteria as specified in the order documents.

Project/Building Description

CBS Factory Order Number:	FO-17096	Building Geometry:	
Purchaser/Customer Information:	Seacoast Crane & Building Co., Inc. P.O. Box 540 Kittery, ME 03904	<i>Width:</i>	120'-0"
Project Name and Location:	Portland Sports Realty, LLC 512 Warren Avenue Portland, ME 04101	<i>Length:</i>	150'-0"
		<i>Eave Height:</i>	34'-0"
		<i>Roof Slope:</i>	1.00/12

Design Standards

AISC: *Specification for Structural Steel for Buildings, Allowable Stress Design/9th Ed.*
 AISI: *North American Specification for the Design of Cold-Formed Steel Structural Members, 2001 Ed.*
 AWS D1.1/D1.1M: *Structural Welding Code – Steel, 2006 Ed.*
 MBMA: *Metal Building Systems Manual, 2006 Edition*

Design Load Criteria

Building Code:	International Building Code, 2009		
Dead Load:	4.06 psf plus primary framing actual weight		
Collateral Load:	5 psf		
Roof Live Load:	20 psf		
Frame Live Load:	20 psf		
Snow Load Criteria:	<i>Ground Snow Load, p_g:</i>	60 psf	<i>Thermal Factor, C_t:</i> 1.00
	<i>Snow Exposure Factor, C_e:</i>	1.00	<i>Flat Roof Snow Load, p_f:</i> 46.2 psf
	<i>Snow Importance Factor, I_s:</i>	1.10	
Wind Load Criteria:	<i>Basic Wind Speed:</i>	100 mph	<i>Occupancy Category:</i> III
	<i>Terrain Exposure:</i>	B	<i>Internal Pressure Coefficients:</i> +0.18/-0.18
	<i>Wind Importance Factor, I_w:</i>	1.15	<i>Components and Cladding not by CBS:</i> +19.57 psf -26.04 psf
Seismic Criteria:	<i>Design Category:</i>	C	<i>S_s:</i> 0.320
	<i>Site Class:</i>	E	<i>S_f:</i> 0.080
	<i>Seismic Importance Factor, I_e:</i>	1.25	<i>S_{as}:</i> 0.486
	<i>Occupancy Category:</i>	III	<i>S_{aj}:</i> 0.187
	<i>Analysis Procedure:</i>	Equivalent Lateral Force Procedure	
	<i>Basic Seismic Force Resisting Systems:</i>	Steel Systems Not Specifically Detailed For Seismic Resistance	
	<i>Response Modification Factors, R:</i>	Frame = 3.00	FSW = 3.00 BSW = 3.00
	<i>Seismic Response Coefficients, C_s:</i>	Frame = 0.165	FSW = 0.202 BSW = 0.202
	<i>Seismic Base Shear, V:</i>	Longitudinal = 78.49 kips Transverse = 67.63 kips	
Mezzanine Loads:	<i>Dead Load:</i>	N/A	Additional Loads: N/A
	<i>Collateral Load:</i>	N/A	
	<i>Live Load:</i>	N/A	

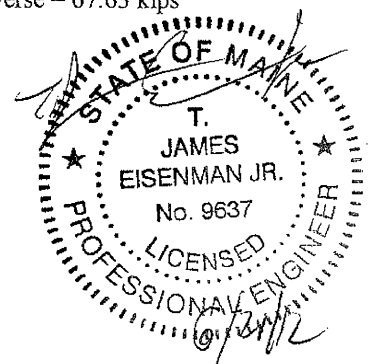
Certification by Engineer

I, T. James Eisenman, Jr., P.E., a licensed engineer in the State of Maine, certify that I have reviewed the design criteria for the steel building system described above and to the best of my knowledge all components have been designed to meet the applicable criteria as specified in the Order Documents.

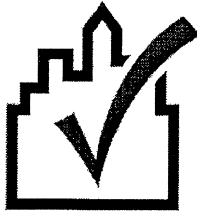
Signature

6/26/12

Date



SEAL



COMcheck Software Version 3.9.0

Envelope Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : Portland Sports Complex

Construction Site:
512 Warren Ave
Portland, ME 04103

Owner/Agent:
Jim Grattelo
Portland Sports Complex
512 Warren Ave
Portland, ME 04103

Designer/Contractor:
William Belanger
Seacoast Crane & Building Co., Inc
98 Route 236
P.O. Box 540
Kittery, ME 03904
207-439-5899

Section 2: General Information

Building Location (for weather data): **Portland, Maine**
Climate Zone: **6a**
Building Type for Envelope Requirements: **Non-Residential**

<u>Activity Type(s)</u>	<u>Floor Area</u>
Sports Arena	18000

Section 3: Requirements Checklist

Envelope PASSES: Design 8% better than code.

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ^(a)
Roof 1: Metal Building, Standing Seam	18350	25.0	13.0	0.032	0.049
Exterior Wall 1: Metal Building Wall	13970	19.0	0.0	0.070	0.069
Entry Doors: Insulated Metal, Swinging	126	---	---	0.140	0.700
Overhead Doors: Insulated Metal, Swinging	196	---	---	0.070	0.700
Floor 1: Slab-On-Grade:Unheated, Vertical 1 ft.	420	---	5.0	---	---

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

- 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- 2. Windows, doors, and skylights certified as meeting leakage requirements.
- 3. Component R-values & U-factors labeled as certified.
- 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- 5. 'Other' components have supporting documentation for proposed U-Factors.
- 6. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- 8. Cargo doors and loading dock doors are weather sealed.
- 9. Recessed lighting fixtures installed in the building envelope are Type IC rated as meeting ASTM E283, are sealed with gasket or caulk.

10. Building entrance doors have a vestibule equipped with self-closing devices.

Exceptions:

- Building entrances with revolving doors.
- Doors not intended to be used as a building entrance.
- Doors that open directly from a space less than 3000 sq. ft. in area.
- Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
- Doors opening directly from a sleeping/dwelling unit.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.0 and to comply with the mandatory requirements in the Requirements Checklist.

William J. Belanger III - Project Manager
Name - Title


Signature

July 3rd, 2012
Date



July 3, 2012

Mr. Bill Belanger III
Seacoast Crane and Building Co.
PO Box 540
Kittery, ME 03904

RE: Project Name - Portland Sports, 512 Warren Avenue, Portland, ME 04103

Thank you for incorporating Thermal Design's liner system in your metal building roof envelope design. Thermal Design has completed numerous hot box tests and uses recognized modeling methods on our insulation liner systems for metal building roof assemblies in order to document installed performance. Although we have not tested the specific combination of a pre-installed R38 liner system, we believe the following should be more than acceptable and should be used to determine compliance.

Performance Reference: ANSI/ASHRAE/IESNA Standard 90.1-2010, *Energy Standard for Building Except Low-Rise Residential Buildings*

Table: A2.3 Assembly U-factors for Metal Building Roofs

Assembly: The R25+R11 (36) Liner System shows an estimated performance of an installed R-32.3 (U-factor: U-0.031) in a standing seam roof with thermal spacer blocks.

Increasing the insulation to a pre-installed R-38 is conservatively expected to yield an installed R-value of R-33.3 (U-0.030). It is important to following manufacturers installation instructions to represent typical installation and expected performance.

If there are any questions or clarifications required, please don't hesitate to contact Thermal Design and thank you for implementing Thermal Design's liner systems in your design.

Certificate of Registration

This is to certify that QUASAR has certified:

Fab Tech, Inc. DBA Corle Building Systems

Head Office: 114 Rosemont Lane, Imler, PA, 16655
Plant & Design Office: 404 Sara Furnace Rd., Imler, PA, 16655

to the Certification Standard:

CAN/CSA A660-10

"Certification of Manufacturers of Steel Building Systems"

Initial Registration
6 July 2007

Date of Issue
23 July 2012

Date of Expiry
6 July 2013

Certificate Number
CORLE0

Scope: Manufacturer of steel building systems.



A handwritten signature in black ink, appearing to be "J. ...", positioned above a horizontal line.

Registrar



Refer to www.cwbgroup.org for current certification status.

International Accreditation Service

CERTIFICATE OF ACCREDITATION

This is to signify that

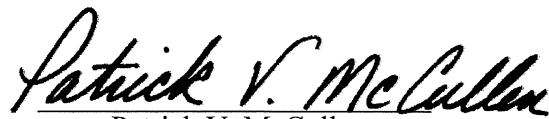
CORLE BUILDING SYSTEMS, INC.

404 SARAH FURNACE ROAD
IMLER, PENNSYLVANIA 16655

Inspection Program for the Manufacture of Metal Building Systems MB-146

has demonstrated that its in-plant inspection program for Part A-Fabrication of Structural Weldments and Cold-formed Products Requiring Welding, Part B-Fabrication of Cold-formed Products Not Requiring Welding, and Part C-Design of Metal Building Systems is in compliance with the International Accreditation Service, Inc., Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems (AC472) and is recognized under Section 1704.2.5.2 of the 2012 *International Building Code*®, and Section 1704.2.2 of earlier code editions, commencing March 1, 2012; expiring February 28, 2013.

Fabrication inspection procedures covered by this certificate are conducted in accordance with the fabricator's approved quality control manual. Periodic plant inspections are conducted by Farabaugh Engineering and Testing Inc. (AA-715), at 404 Sarah Furnace Road, Imler, Pennsylvania, to monitor the fabricator's quality management system verifying continual compliance with the requirements as listed in the above scope of accreditation. Accreditation is limited to the specified inspections related to the fabrication processes and procedures only. Accreditation does not cover the product, or the design or performance characteristics of the fabricated product.



Patrick V. McCullen
Vice President



C. P. Ramani, P.E.
President

Print Date: 04/04/2012

This accreditation certificate supersedes any IAS accreditation certificate bearing an earlier date. The certificate becomes invalid upon suspension, cancellation or revocation of accreditation.
See the IAS Accreditation Listings on the web at www.iasonline.org for current accreditation information, or contact IAS directly at (562) 364-8201



PRODUCT CERTIFICATION

MADE AND MELTED IN THE USA

CUSTOMER NAME CORLE BUILDING SYSTEMS, INC.		SPECIFICATION STANDARD GALVA@ SKP SS-GR50C1 AZ50 CTA DRY					ASTM A792-10			
PRODUCT NAME GALVALUME@ SHEET		ORDER NUMBER 170501- 1	BILL OF LADING NUMBER 591613	INVOICE NUMBER 966773	SHIP DATE 8/27/12					
SIZE .0190IN * 41.6100IN * COIL		CUST PO# CBS6236		TR.FIRM PO# 162899		CUSTOMER SPECIFICATION				
PACKING NUMBER 587420000G	Vendor Coil #	HEAT NUMBER F43440	HARDNESS	OLSEN	Y.P. PSI 61480	T.S. PSI 66700	EL (%) 25.2	R VALUE	BEND TEST OK	COATING THICKNESS WEIGHT

HEAT NUMBER	C (%)	Mn (%)	S (%)	P (%)	Si (%)	Al (%)	Cu (%)	Ti (%)	Cb (%)	Ni (%)	Cr (%)	Mo (%)	V (%)	N (%)	B (%)
F43440	.130	.410	.007	.008	.007	.034	.020	.001	.000	.010	.02	.001	.001	.004	.000

GALVALUME@ is a registered trademark of BIEC International, Inc.

This is to certify that the above test results are on record for the described materials.

STATE OF WEST VIRGINIA

County Of BROOKE

The foregoing instrument was acknowledged before me

This _____ day of _____ by _____

My commission expires on _____

PA1020V1

Richard L. Nestor
Quality Assurance Department

Notary Public

(Affix Stamp Here)

39,238 lbs



PRODUCT CERTIFICATION

MADE AND MELTED IN THE USA

CUSTOMER NAME CORLE BUILDING SYSTEMS, INC.			SPECIFICATION STANDARD GALVA@ SKP SS-GR80C1 AZ50 CTA DRY				ASTM A792-10				
PRODUCT NAME GALVALUME@ SHEET			ORDER NUMBER 170500- 1	BILL OF LADING NUMBER 592271	INVOICE NUMBER 967613	SHIP DATE 9/11/12					
SIZE .0190IN * 42.9375IN * COIL			CUST PO# CBS6236		TR.FIRM PO# 162898		CUSTOMER SPECIFICATION				
PACKING NUMBER H25660000G	Vendor Coil #	HEAT NUMBER R45653	HARDNESS	OLSEN	Y.P. KSI 111	T.S. KSI 113	EL (%) 4.0	R VALUE	BEND TEST OK	COATING THICKNESS WEIGHT	

HEAT NUMBER	C (%)	Mn (%)	S (%)	P (%)	Si (%)	Al (%)	Cu (%)	Ti (%)	Cb (%)	Ni (%)	Cr (%)	Mo (%)	V (%)	N (%)	B (%)
R45653	.040	.310	.014	.009	.006	.033	.020	.001	.010	.010	.02	.001	.001	.004	.000

GALVALUME@ is a registered trademark of BIEC International, Inc.

This is to certify that the above test results are on record for the described materials.

STATE OF WEST VIRGINIA

County Of BROOKE

The foregoing instrument was acknowledged before me

This _____ day of _____ by _____

My commission expires on _____

Notary Public

(Affix Stamp Here)

Richard L. Vestor
Quality Assurance Department

40,374



PRODUCT CERTIFICATION

MADE AND MELTED IN THE USA

CUSTOMER NAME CORLE BUILDING SYSTEMS, INC.		SPECIFICATION STANDARD ACR.G@ SKP SS-GR50C1 AZ55 ACR DRY					ASTM A792-10			
PRODUCT NAME GALVALUME PLUS@ SHEET		ORDER NUMBER 170521-1	BILL OF LADING NUMBER 593371	INVOICE NUMBER 968980	SHIP DATE 9/28/12					
SIZE .0236IN * 29.9375IN * COIL		CUST PO# CBS6249		TR.FIRM PO# 162930		CUSTOMER SPECIFICATION				
PACKING NUMBER	Vendor Coil #	HEAT NUMBER	HARDNESS	OLSEN	Y.P. PSI	T.S. PSI	EL (%)	R VALUE	BEND TEST	COATING/THICKNESS WEIGHT
596360200G		R45409			66130	68630	28.1		OK	
596610100G		R45409			63330	71540	28.6		OK	

HEAT NUMBER	C (%)	Mn (%)	S (%)	P (%)	Si (%)	Al (%)	Cu (%)	Ti (%)	Cb (%)	Ni (%)	Cr (%)	Mo (%)	V (%)	N (%)	B (%)
R45409	.180	.760	.009	.008	.009	.034	.020	.001	.000	.010	.02	.002	.000	.005	.000
R45409	.180	.760	.009	.008	.009	.034	.020	.001	.000	.010	.02	.002	.000	.005	.000

GALVALUME@ PLUS is a registered trademark of BIEC International, Inc.

This is to certify that the above test results are on record for the described materials.

STATE OF WEST VIRGINIA

County Of BROOKE

The foregoing instrument was acknowledged before me

This _____ day of _____, _____ by _____

My commission expires on _____

PAR040V1

Notary Public

(Affix Stamp Here)

Richard L. Nestor
Quality Assurance Department

LIBERTY STEEL PRODUCTS INC.

P.O. BOX 175
NORTH JACKSON, OHIO 44451

PHONE: 330/538-2236
FAX: 330/538-2836

Sep. 26, 2012

CERTIFICATE OF ANALYSES

PURCHASE ORDER NO: CBS6628

LIBERTY ORDER NO: 63663

CUSTOMER: **FABTECH INC**
404 SARA FURNACE ROAD
PO BOX 429
IMLER PA 16555

SHIPPER NO: H14121

WEIGHT SHIPPED: 8,260 #

SHIPPED DATE: 9/27/12

ATTENTION:

GRADE: GALV ASTM, A653-09A SS GRADE 55 G-60 MIN SPANGLE P/N 09717.75

--- FOLD

TAG NUMBER	WEIGHT	HEAT NUMBER	C	Mn	P	S	AL	Cb	VA	RB
ITEM NO 1	.097 X	17.750 X COIL								
A2573	8260	11224300	.03	.54	.010	.003	.029	.044	.002	81
		70277 YLD								
		76719 TNS	CU	NI	CR	MO	TI			
		23.5 ELN	.10	.04	.05	.02	.002			

The above physical and chemical analyses were supplied by the producing mill or tested on our own equipment.

James J. Amodeo
LIBERTY STEEL PRODUCTS, INC.
CHIEF METALLURGIST

LIBERTY STEEL PRODUCTS INC.

P.O. BOX 175
NORTH JACKSON, OHIO 44451

PHONE: 330/538-2236
FAX: 330/538-2836

Sep. 25, 2012

CERTIFICATE OF ANALYSES

PURCHASE ORDER NO: CBS6628

LIBERTY ORDER NO: 63662

SHIPPER NO: H14104

WEIGHT SHIPPED: 7,640 #

SHIPPED DATE: 9/25/12

CUSTOMER: FABTECH INC
404 SARA FURNACE ROAD
2378 STATE ROAD 345
IMLER PA 16555

ATTENTION:

GRADE: GALV ASTM, A653-09A SS GRADE 55 G-60 MIN SPANGLE P/N 088417.75

--- FOLD

TAG NUMBER	WEIGHT	HEAT NUMBER	C	Mn	P	S	AL	Cb	YA	RB
ITEM NO 1	.0884 X	17.750 X COIL								
A2529	7640	41223092	.05	.52	.011	.003	.026	.044	.001	83
		71437 YLD								
		78020 TNS	CU	NI	CR	MO	TI			
		24.0 ELN	.11	.05	.04	.02	.002			

The above physical and chemical analyses were supplied
by the producing mill or tested on our own equipment.

CLS/LSP-30 REV. 1/24/94


LIBERTY STEEL PRODUCTS, INC.
CHIEF METALLURGIST

LIBERTY STEEL PRODUCTS INC.

P.O. BOX 175
NORTH JACKSON, OHIO 44451

PHONE: 330/538-2236
FAX: 330/538-2836

Sep. 25, 2012

CERTIFICATE OF ANALYSES

PURCHASE ORDER NO: CBS6628

LIBERTY ORDER NO: 63663

CUSTOMER: FABTECH INC
404 SARA FURNACE ROAD
PO BOX 429
IMLER PA 16555

SHIPPER NO: H14104

WEIGHT SHIPPED: 8,220 #

SHIPPED DATE: 9/25/12

ATTENTION:

GRADE: GALV ASTM, A653-09A SS GRADE 55 G-60 MIN SPANGLE P/N 09717.75

--- FOLD

TAG NUMBER	WEIGHT	HEAT NUMBER	C	Mn	P	S	AL	Cb	VA	RB
ITEM NO 1	.0970 X	17.750 X COIL								
A2572	8220	11224300	.03	.54	.010	.003	.029	.044	.002	81
		70277 YLD								
		76719 TNS	CU	NI	CR	MO	TI			
		23.5 ELN	.10	.04	.05	.02	.002			

The above physical and chemical analyses were supplied by the producing mill or tested on our own equipment.


LIBERTY STEEL PRODUCTS, INC.
CHIEF METALLURGIST

LIBERTY STEEL PRODUCTS INC.

PO. BOX 175
NORTH JACKSON, OHIO 44451

PHONE: 330/538-2236
FAX: 330/538-2836

Oct. 1, 2012

CERTIFICATE OF ANALYSES

PURCHASE ORDER NO: CBS6628

LIBERTY ORDER NO: 63662

CUSTOMER: FABTECH INC
404 SARA FURNACE ROAD
PO BOX 429
IMLER PA 16555

SHIPPER NO: H14140

WEIGHT SHIPPED: 7,600 #

SHIPPED DATE: 10/01/12


ATTENTION:

GRADE: GALV ASTM, A653-09A SS GRADE 55 G-60 MIN SPANGLE P/N 088417.75

--- FOLD

TAG NUMBER	WEIGHT	HEAT NUMBER	C	Mn	P	S	AL	Cb	VA	RB
ITEM NO 1	.0884 X	17.750 X COIL								
A2528	7600 7540	41223092 71437 YLD 78020 TNS 24.0 ELN	.05 CU .11	.52 NI .05	.011 CR .04	.003 MO .02	.026 TI .002	.044	.001	83

The above physical and chemical analyses were supplied by the producing mill or tested on our own equipment.


LIBERTY STEEL PRODUCTS, INC.
CHIEF METALLURGIST

CERTIFICATE OF ANALYSIS AND TESTS

Customer Name: CORLE BUILDING SYSTEMS INC
 Address:

Date Shipped: 7/30/2012
 P.O. Number: CBS5836-A
 LTS: 00054316

DESCRIPTION

1) 3/16(.1775MIN) HRD 72.0000 x 372.0000 ASTM A572 07 GR55 P/N PL1875

Heat Number	C	Mn	P	S	Si	Ni	Cr	Mo	Al	Cu	Cb	V		Tensile Lbs./Sq. In.	Yield	Elong. Percent
1) 4112157	0.070	0.750	0.011	0.007	0.010				0.041	0.030	0.035			72553	67936	30.0%
														70040	55982	29.8%

This Material is in Accordance with and also Conforms to: Melted & Mfg in USA - Arcelor-CLE

We hereby certify the foregoing data is a true copy of the data furnished us by our supplier or resulting from tests performed in a recognized laboratory.

Mid-West Materials
 P.O. Box 345
 3687 Shepard Road
 Perry Twp. OH 44081

Authorized Agent: David Boldt

CERTIFICATE OF ANALYSIS AND TESTS

Customer Name: CORLE BUILDING SYSTEMS INC
Address:

Date Shipped: 9/5/2012
P.O. Number: CBS5836-C
LTS: 00054749

DESCRIPTION

1) 1/4(.240MIN) HRD 72.0000 x 372.0000 ASTM A572 07 GR55 P/N PL2500

	Heat Number	C	Mn	P	S	Si	Ni	Cr	Mo	Al	Cu	Cb	V	Ti	Tensile	Yield	Elong.
															Lbs./Sq. In.		Percent
1)	4143353-2	0.080	1.390	0.013	0.005	0.090				0.030	0.030	0.060	0.005	0.034	95700	86800	26.0%
															95870	84545	24.8%

This Material is in Accordance with and also Conforms to: Melted & Mfg in USA - Arcelor-CLE

Mid-West Materials
P.O. Box 345
3687 Shepard Road
Perry Twp. OH 44081

We hereby certify the foregoing data is a true copy of the data furnished us by our supplier or resulting from tests performed in a recognized laboratory.

Authorized Agent: *David Volante*



Independence Tube

6226 W. 74th St
Chicago, IL 60638
708-496-0380
Fax: 708-563-1950

independencetube.com
itctube.com
Certificate Number: CHI 907263

Sold By:
INDEPENDENCE TUBE CORPORATION
6226 W. 74th St.
Chicago, IL 60638
Tel: 708-496-0380
Fax: 708-563-1950

Purchase Order No: APA15408
Sales Order No: CHI 209385 - 1
Bill of Lading No: CHI 121259 - 2
Invoice No: CHI 289763 - 1

Shipped: 8/2/2012
Invoiced: 8/2/2012

Sold To:
2942 - METALS USA PLATES & SHAPES
81 CENTURY DRIVE
AMBRIDGE, PA 15003

Ship To:
3 - METALS USA PLATES & SHAPES (VMI)
81 CENTURY DRIVE
***** V M I *****
AMBRIDGE, PA 15003

CERTIFICATE of ANALYSIS and TESTS

Certificate No: CHI 907263

Customer Part No:

Test Date: 8/1/2012

ROUND A500 GRADE B(C)
5.563"OD (5"NPS) X SCH40 X 42"

Total Pieces Total Weight
10 6,140

Heat Number: 125716

Bundle Tag	Yield, Tensile Strength, Elongation, Measurements	Y/T Ratio	Pieces	Weight
69361B	YLD=52190/TEN=62973/ELG=40.54	0.8288	10	6,140

Heat Number *** Chemical Analysis ***
125716
C=0.0500 Mn=1.0300 P=0.0140 S=0.0010 Si=0.0150 Al=0.0340 Cu=0.0450 Cr=0.0300 Mo=0.0070
V=0.0010 Ni=0.0160
Carbon Eq.=0.2333 Carbon Eq. = C + (Mn/6) + ((Cr + Mo + V)/5) + ((Ni + Cu)/15)

Certification:

I certify that the above results are a true and correct copy of records prepared and maintained by Independence Tube Corporation. Sworn this day, 8/1/2012

Jose Martinez, QMS Manager

WE PROUDLY MANUFACTURE ALL OF OUR HSS IN THE USA.
INDEPENDENCE TUBE PRODUCT IS MANUFACTURED, TESTED,
AND INSPECTED IN ACCORDANCE WITH ASTM STANDARDS.

CURRENT STANDARDS:
.....A500/A500M-10a
.....A513-07
.....A252-98 (2002)

METALS USA
CORLE BUILDING SYSTEMS
Black Plain End Pipe A600 Gr B Structural
5 Sch 40 X 42"
PART NO:

PO: CBS8873
FORMED: TAG CBS8873-7
HEAT: 125716

Certificate of Mill Test Results
APA-183691-8
28-Sep-2012
Page 1 of 1



CMC STEEL ALABAMA
101 S 50TH STREET
BIRMINGHAM AL 35212-3525

CERTIFIED MILL TEST REPORT
For additional copies call
800-637-3227

We hereby certify that the test results presented here
are accurate and conform to the reported grade specification

Marcus W. McCluney
Marcus W. McCluney - CMC Steel AL
Quality Assurance Manager

HEAT NO.: 1021220 SECTION: FLAT 3/8x10 40'0" A529-55 GRADE: ASTM A529-05 Grade 55 ROLL DATE: 07/28/2012 MELT DATE: 07/23/2012	S O L D T O	Metals USA Plates & Shapes 50 Cabot Blvd E Langhorne PA US 19047-1802 2675802100	S H I P T O	Metals Usa Ambridge 81 Century Dr Ambridge PA US 15003-0000 7242667708 7242512255	Delivery#: 80827323 BOL#: 70293325 CUST PO#: APA-15695 CUST P/N: DLVRY LBS / HEAT: 18360.000 LB DLVRY PCS / HEAT: 36 EA
---	----------------------------	--	----------------------------	--	--

Characteristic	Value	Characteristic	Value	Characteristic	Value
C	0.23%	Elongation test 1	23%		
Mn	0.74%	Elongation Gage Lgth test 1	8IN		
P	0.015%	Yield to tensile ratio test1	0.72		
S	0.036%	Yield Strength test 2	61.9ksi		
Si	0.20%	Tensile Strength test 2	85.6ksi		
Cu	0.28%	Elongation test 2	23%		
Cr	0.19%	Elongation Gage Lgth test 2	8IN		
Ni	0.17%	Yield to tensile ratio test2	0.72		
Mo	0.052%				
V	0.025%				
Cb	0.001%				
Sn	0.012%				
B	0.0003%				
Ti	0.001%				
N	0.0010%				
Carbon Eq A6	0.44%				
Carbon Eq A529	0.47%				
Yield Strength test 1	60.3ksi				
Tensile Strength test 1	83.8ksi				

THIS MATERIAL IS FULLY KILLED, 100% MELTED AND MANUFACTURED IN THE USA, WITH NO WELD REPAIR OR MERCURY CONTAMINATION IN THE PROCESS.

REMARKS :

MATERIAL ALSO MAKES A529 GR. 50

08/31/2012 20:39:27
Page 1 OF 1

METALS USA
CORLE BUILDING SYSTEMS
Carbon Steel UM Plate A 529 Gr 50
3/8 x 10 X 40'
PART NO:
HEAT: 1021220
PO: C856673
POINCO: TAG-C856673-2
A PA-193694-2
28-Sep-2012
Page 1 of 1
Certificate of Mill Test Results



CMC STEEL ALABAMA
101 S 50TH STREET
BIRMINGHAM AL 35212-3525

CERTIFIED MILL TEST REPORT
For additional copies call
800-637-3227

We hereby certify that the test results presented here
are accurate and conform to the reported grade specification

M. W. McCluney
Marcus W. McCluney - CMC Steel AL
Quality Assurance Manager

HEAT NO.: 1021784 SECTION: FLAT 1/4x6 40"0" A529-55 GRADE: ASTM A529-05 Grade 55 ROLL DATE: 08/31/2012 MELT DATE: 08/27/2012	S O L D T O	Metals USA Plates & Shapes 50 Cabot Blvd E Langhorne PA US 19047-1802 2675802100	S H I P T O	Metals Usa Ambridge 81 Century Dr Ambridge PA US 15003-0000 7242667708 7242512255	Delivery#: 80834373 BOL#: 70295633 CUST PO#: APA-15738 CORLE CUST P/N: DLVRY LBS / HEAT: 17952.000 LB DLVRY PCS / HEAT: 88 EA
--	----------------------------	--	----------------------------	--	--

Characteristic	Value	Characteristic	Value	Characteristic	Value
C	0.21%	Elongation test 1	25%		
Mn	0.71%	Elongation Gage Lgth test 1	8IN		
P	0.013%	Yield to tensile ratio test1	0.73		
S	0.032%	Yield Strength test 2	58.5ksi		
Si	0.18%	Tensile Strength test 2	81.4ksi		
Cu	0.31%	Elongation test 2	25%		
Cr	0.12%	Elongation Gage Lgth test 2	8IN		
Ni	0.13%	Yield to tensile ratio test2	0.72		
Mo	0.041%				
V	0.024%				
Cb	0.000%				
Sn	0.012%				
B	0.0004%				
Ti	0.001%				
N	0.0072%				
Carbon Eq A6	0.40%				
Carbon Eq A529	0.43%				
Yield Strength test 1	58.3ksi				
Tensile Strength test 1	80.3ksi				

THIS MATERIAL IS FULLY KILLED, 100% MELTED AND MANUFACTURED IN THE USA, WITH NO WELD REPAIR OR MERCURY CONTAMINATION IN THE PROCESS.
REMARKS :

MATERIAL ALSO MAKES A529 GR. 50

09/12/2012 11:53:30
Page 1 OF 1





CMC STEEL ALABAMA
101 S 50TH STREET
BIRMINGHAM AL 35212-3525

CERTIFIED MILL TEST REPORT
For additional copies call
800-637-3227

We hereby certify that the test results presented here
are accurate and conform to the reported grade specification

Marcus W. McCluney
Marcus W. McCluney - CMC Steel AL
Quality Assurance Manager

HEAT NO.:1021879 SECTION: FLAT 3/8x6 40*0" A529-55 GRADE: ASTM A529-05 Grade 55 ROLL DATE: 09/06/2012 MELT DATE: 09/05/2012	S O L D T O	Metals USA Plates & Shapes 50 Cabot Blvd E Langhorne PA US 19047-1802 2675802100	S H I P T O	Metals Usa Ambridge 81 Century Dr Ambridge PA US 15003-0000 7242667708 7242512255	Delivery#: 80831215 BOL#: 70294597 CUST PO#: APA-15649 CUST P/N: DLVRY LBS / HEAT: 18360.000 LB DLVRY PCS / HEAT: 60 EA
---	----------------------------	--	----------------------------	--	--

Characteristic	Value	Characteristic	Value	Characteristic	Value
C	0.22%	Elongation test 1	24%		
Mn	0.73%	Elongation Gage Lgth test 1	8IN		
P	0.022%	Yield to tensile ratio test1	0.70		
S	0.037%	Yield Strength test 2	62.2ksi		
Si	0.23%	Tensile Strength test 2	87.5ksi		
Cu	0.34%	Elongation test 2	24%		
Cr	0.19%	Elongation Gage Lgth test 2	8IN		
Ni	0.12%	Yield to tensile ratio test2	0.71		
Mo	0.043%				
V	0.023%				
Cb	0.001%				
Sn	0.012%				
B	0.0003%				
Ti	0.001%				
N	0.0078%				
Carbon Eq A6	0.43%				
Carbon Eq A529	0.47%				
Yield Strength test 1	60.7ksi				
Tensile Strength test 1	87.0ksi				

THIS MATERIAL IS FULLY KILLED, 100% MELTED AND MANUFACTURED IN THE USA, WITH NO WELD REPAIR OR MERCURY CONTAMINATION IN THE PROCESS.

REMARKS :

MATERIAL ALSO MAKES A529 GR. 50

09/07/2012 01:45:39
Page 1 OF 1

Certificate of Mill Test Results
AFA-193691-3
28-Sep-2012
Page 1 of 1

PO: CBS6673
POREQ: TAG CBS6673-3
HEAT: 1021879

METALS USA
CORLE BUILDING SYSTEMS
Carbon Flat A 529 Gr 55
3/8 x 6 x 40"
PART NO:

METALS USA

CORLE BUILDING SYSTEMS
Carbon Wide Flange Beam A 992
16 x 31 X 33
PART NO:

PO: CBS6673
POREQ: TAG CBS6673-6
HEAT: 59052429

Certificate of Mill Test Results
APA-193691-6
28-Sep-2012
Page 1 of 1



US-ML-MIDLOTHIAN
300 WARD ROAD
MIDLOTHIAN, TX 76065
USA

CERTIFIED MATERIAL TEST REPORT

CUSTOMER SHIP TO METALS USA PLATE SHAPES NE INC 81 CENTURY DR AMBRIDGE, PA 15003-2543 USA		CUSTOMER BILL TO METALS USA PLATES SHAPES NE IN 50 CABOT BLVD E LANGHORNE, PA 19047-1802 USA		GRADE 992/572-50		SHAPE / SIZE WFBEAM SHAPE_1 / 16 X 31# / 410 X 46.1	
SALES ORDER 137818/000020				LENGTH 60'00"		WEIGHT 13,020 LB	HEAT / BATCH 5905242902
CUSTOMER PURCHASE ORDER NUMBER APA-15596				BILL OF LADING 1327-0000022077		DATE	
SPECIFICATION / DATE of REVISION A572/A572M-07 A992/A992M-11 ASTM A6/A6M-11							

CHEMICAL COMPOSITION													
C %	Mn %	P %	S %	Si %	Cu %	Ni %	Cr %	Mo %	Se %	V %	Nb %	Al %	
0.06	0.89	0.011	0.041	0.21	0.28	0.11	0.12	0.030	0.009	0.002	0.018	0.002	
CHEMICAL COMPOSITION													
CEqvA6 %													
0.3													

MECHANICAL PROPERTIES							
YS KSI	UTS KSI	YS MPa	UTS MPa	G/L Inch	G/L mm		
58.3	72.8	409	503	8.000	200.0		
59.4	73.0	402	502	8.000	200.0		
MECHANICAL PROPERTIES							
Elong %	Y/T ratio %						
27.20	0.800						
27.40	0.800						

COMMENTS / NOTES

The above figures are certified chemical and physical test records as contained in the permanent records of company. This material, including the billets, was melted and manufactured in the USA. We certify that these data are correct and in compliance with specified requirements. CMTR complies with EN 10204 3.1.

Maskan
BHASKAR YALAMANCHILI
QUALITY DIRECTOR

Tom Harrington
TOM HARRINGTON
QUALITY ASSURANCE MGR.



US-ML-MIDLOTHIAN
300 WARD ROAD
MIDLOTHIAN, TX 76065
USA

CERTIFIED MATERIAL TEST REPORT

CUSTOMER SHIP TO METALS USA PLATE SHAPES NE INC METALS USA PLATES SHAPES NE IN 81 CENTURY DR AMBRIDGE, PA 15003-2543 USA		CUSTOMER BILL TO 50 CABOT BLVD E LANGHORNE, PA 19047-1802 USA		GRADE 992/572-50	SHAPE / SIZE WEBEAM SHAPE_1 / 12 X 16# / 310 X 23.8	
SALES ORDER 132988000360		SPECIFICATION / DATE or REVISION A572/A572M-07 A992/A992M-11 ASTM A616M-11		LENGTH 50'00"	WEIGHT 11.200 LB	HEAT / BATCH 5905142802
CUSTOMER PURCHASE ORDER NUMBER APA15518		BILL OF LADING 1327-0000017746		DATE 08/15/2012		

C %	Mn %	P %	S %	Si %	Cu %	Ni %	Cr %	Mo %	Sa %	V %	Nb %	Al %
0.08	0.86	0.016	0.010	0.24	0.38	0.10	0.15	0.031	0.007	0.002	0.019	0.003

C %	CEqA6 %
0.1	

YS KSI	UTS KSI	YS MPa	UTS MPa	QL Inch	QL mm
61.1	76.9	417	526	8.000	200.0
60.5	76.2	421	531	8.000	200.0

Elong %	Y/T rat %
23.00	0.794
21.90	0.794

COMMENTS / NOTES

The above figures are certified chemical and physical test records as contained in the permanent records of company. This material, including the billets, was melted and manufactured in the USA. We certify that these data are correct and in compliance with specified requirements. CMTR complies with EN 10204 3.1.

Maskay BHASKAR YALAMANCHILI
QUALITY DIRECTOR

Tom Harrington TOM HARRINGTON
QUALITY ASSURANCE MGR.



US-ML-MIDLOTHIAN
300 WARD ROAD
MIDLOTHIAN, TX 76065
USA

CUSTOMER SHIP TO METALS USA PLATE SHAPES NE INC 81 CENTURY DR AMBRIDGE, PA 15003-2543 USA		CUSTOMER BILL TO METALS USA PLATES SHAPES NE IN 50 CABOT BLVD F LANGHORNE, PA 19047-1802 USA		GRADE 992/572-50	SHAPE / SIZE WFBEAM SHAPE_1 / 10 X 39# / 250 X 58	
SALES ORDER 135353/000500		LENGTH 50'00"	WEIGHT 11,700 LB	HEAT / BATCH 5801181103		
CUSTOMER PURCHASE ORDER NUMBER APA-15539		BILL OF LADING 1327-0000019615	DATE 08/25/2012	SPECIFICATION / DATE of REVISION A572/A572M-07 A992/A992M-11 ASTM A6/A6M-11		

CHEMICAL COMPOSITION												
C %	Mn %	P %	S %	Si %	Cu %	Ni %	Cr %	Mo %	Sn %	V %	Nb %	Al %
0.09	0.95	0.015	0.025	0.24	0.26	0.07	0.17	0.025	0.006	0.002	0.022	0.003

CHEMICAL COMPOSITION												
CEqvA6 %												
0.3												

MECHANICAL PROPERTIES											
YS KSI	UTS KSI	YS MPa	UTS MPa	C/L Incht	C/L mm						
57.1	73.2	394	505	8.000	200.0						
55.8	71.0	385	504	8.000	200.0						

MECHANICAL PROPERTIES	
Elong %	
26.20	
26.10	

COMMENTS / NOTES

The above figures are certified chemical and physical test records as contained in the permanent records of company. This material, including the billets, was melted and manufactured in the USA. We certify that these data are correct and in compliance with specified requirements. CMTR complies with EN 10204 3.1.

Bhaskar
BHASKAR YALAMANCHILI
QUALITY DIRECTOR

Tom Harrington
TOM HARRINGTON
QUALITY ASSURANCE MGR.

METALS USA
 CORLE BUILDING SYSTEMS
 Carbon Wide Flange Beam A 992
 10 x 39 X 50
 PART NO:
 HEAT: 58011811
 PO: CBS6673
 POREQ: TAG/CBS6673-4
 AFA-193691-4
 28-Sep-2012
 Page 1 of 1
 Certificate of Mill Test Results

SPECIAL INSPECTIONS
PORTLAND SPORTS CENTER, 512 WARREN AVENUE, PORTLAND MAINE
JULY – OCTOBER, 2012

Date	Inspector	Summary
7/13/2012	KAW/LSC	Front wall (towards Joker's/Pkg Lot – rebar inspection – Pilaster/wall footings – Sat
7/15/2012	KAW	Conc. Cast – Front wall footings.
7/16/2012	KAW	Front wall Forms stripped wall footing thickness Varies – 9 ½” +. Pilaster footing thickness varies 10”, 10 ¼”, 10 ½” – checked w/designer – Ted Greenlaw who agrees thickness variation is acceptable see follow-up e-mail from Ted Greenlaw dtd 9/12/2012). Bill Belanger will have contractor block up forms (2 X 12”) to get 12” Thickness. Left sidewall (towards Prescott) footing rebar installed.
7/18/2012	KAW	Rear wall (towards RR) footing rebar installed. Left wall forms stripped, Conc thickness is satisfactory (12” +)
7/20/2012	KAW	Rear wall footing forms stripped and backfilled, Front wall pilaster rebar installed.
7/23/2012	KAW	Rear wall cast less area for access (OVHD Door Wall) which will be 12” Thk.
7/25/2012	KAW	Ft wall forms stripped, geo-forms installed – rear wall rebar is SAT, forms are correct dims for concrete.
7/27/2012	EAB	Right wall (against the Dome) forms and rebar set. Rear wall forms stripped. Geoforms set on rear wall.
7/30/2012	EAB	Forms and rebar set for continuous concrete beam at column line #2 (furthest beam from existing building); pouring concrete when I left. Forms and rebar were being set for column line #6 (1 from existing building). Rebar and forms were right size and depth.
7/31/2012	EAB	The concrete beams at column lines #2, #3, and #6 had been poured. Forms were set for the concrete beams at column line #4 and #5 to be poured in the afternoon. Rebar and forms were right width and depth. (16” X 12”)

8/2/2012 KAW Checked concrete beams for depth and width – all meet or exceed plan dims. Also checked grade beam for width (area was backfilled) – 33” exceeds 30” req’d. All concrete has been poured and interior areas are being graded. Two Geo-Foam blocks has floated due to large rain events last week – ballasted with 3,500# Conc Blocks until backfilled and secured. Tie rods were according to Bill Belanger) “Bar Lock w/High Strength Couplers”, as an approved equal.

8/29/2012 KAW/LSC Periodic inspection of high-strength bolts... All bolts accessible from ground visually observed and hand checked for looseness - all OK. Observed one roof peak joint in mid-building frame line from scissor lift – OK. Large majority of frame bolts and roof purlin bolts visible from ground – all appeared to be in place. Note-wall girt bolts are medium strength. (LSC).

9/6/2012 KAW Inspection for the remainder of the purlin and flange bracing.

9/17/2012 KAW Inspection of site improvements and final for building materials (framing and roof).

*Photographs available for most site visits.