



**CERTIFICATE OF ANALYSIS AND GUARANTEE OF SEVERSTAL WARREN, INC., -
MANUFACTURER OF STEEL SHEET, ALUMINUM COATED (TYPE 2) FOR CORRUGATED
STEEL PIPE.**

The Undersigned, being first duly sworn, deposes, states and certifies as follows:

1. The Undersigned is the General Manager – Metallurgical Services & Quality Control for Severstal Warren, Inc. (the “Manufacturer”), carrying on business in the City of Warren, County of Trumbull and State of Ohio, and;
2. The Undersigned is duly authorized to make and execute this Certificate and Guarantee for and on behalf of Manufacturer;
3. The grade of metal to be furnished under the specifications is “Severstal Warren, Inc. Sheet” and said Sheet shall bear the logo and stencil of Manufacturer, as depicted herein;
4. Sheet furnished under this certificate conforms to AASHTO M-274 and ASTM A-929
5. The Sheet bearing Manufacturer’s stencil conforms to the following ladle analysis:

| Chemical Element | Composition % | Tolerance Over Max. & Under Min. % |
|---|---------------|---------------------------------------|
| Aggregate Carbon, Manganese, Sulphur, Phosphorus & Silicon | 0.70% Max. | +0.04% |
| Sulphur | 0.050% Max. | +0.01% |

6. The following is the aluminum bath ANALYSIS PERCENTAGE OF COMPLIANCE:

| Chemical Element | Composition % | Chemical Element | Composition % |
|------------------|---------------|--------------------|---------------|
| Iron | 3.0% | Other – each max. | 0.05% |
| Silicon | 0.35% | Other – total max. | 0.20% |
| Magnesium | 0.50% | | |

7. Sheet bearing Manufacturer’s stencil shall conform to the standard Aluminized Sheet thickness tolerance and shall carry a spelter coating of not less than 1.0 ounces per square foot of double exposed surface, per triple spot testing and 0.90 ounces per square foot of double exposed surface, per single spot testing.
8. Sheet bearing Manufacturer’s stencil shall have the following mechanical properties, when tested in accordance with ASTM standards:

| Yield Point | Tensile Strength | Elongation |
|-------------------|-------------------|------------------|
| 33,000 psi (Min.) | 45,000 psi (Min.) | 20% (Min.) in 2" |

9. Sheet furnished under this Certificate shall conform to the requirements set forth herein and shall bear a suitable identification brand or mark;
10. The Sheet covered by this Certificate has been produced in the United States.

Manufacturer reserves the right to obtain duplicate samples of any rejected Sheet to confirm analysis and coating. Any Sheet that does not conform to the specifications set forth herein shall, at Manufacturer’s election, be replaced or the price paid therefore refunded in accordance with Manufacturer’s standard Terms and Conditions of Sale. The guarantees set forth above are in lieu of and exclude any and all other warranties and guarantees not expressly set forth herein, whether express or implied by operation of law or otherwise, including but not limited to any implied warranties of merchantability or fitness. Manufacturer shall not be liable for any special, indirect, consequential, or incidental damages, whether arising under contract, warranty, tort or any other theory of liability.

State of Ohio)
)SS
County of Trumbull)

SEVERSTAL WARREN, INC.

General Manager – Metallurgical Services & Quality Control

Subscribed and sworn to before me this
16th day of December, 2008

Notary Public, State of Ohio

My Commission Expires: 5/29/2013

JUDITH A. REICHERT, NOTARY PUBLIC
STATE OF OHIO
MY COMMISSION EXPIRES 5/29/2013