



**CERTIFICATE OF ANALYSIS AND GUARANTEE OF SEVERSTAL WARREN, INC., -
MANUFACTURER OF STEEL SHEET, ZINC COATED 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-218 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 a typical chemical analysis of the Sheet to be furnished under the specifications.

Chemical Element	Composition %	Chemical Element	Composition %
Carbon	0.05%	Manganese	0.30%
Phosphorus	0.015%	Sulphur	0.015%
Silicon	0.05%		

7. Sheet bearing Manufacturer’s stencil shall conform to the standard Galvanized Sheet thickness tolerance and shall carry a spelter coating of not less than **four ounces per square foot** of double exposed surface;
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. Polymer coated coil product conforms to AASHTO M-246 and ASTM A742– 10 mil/side polymer thickness;
11. 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.

Daniel H. Emanuele

General Manager – Metallurgical Services & Quality Control

Subscribed and sworn to before me this
2nd day of September, 2008

Judith A. Reichert

Notary Public, State of Ohio

My Commission Expires: May 29, 2013