

## Challenge

### Issue

Zinc rich primer/epoxy/urethane paint system required annual maintenance and touch up with increased costs and resulting damage to structure.

### Goals

- Reduce annual maintenance painting and associated costs
- Extend structural steel life

### Root Cause

Condensing ammonium sulfate vapors on surface lead to premature blistering and delamination.



Failed paint system after 1 year exposure

## Solution

### Preparation

- Decontaminate surfaces
- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

### Application

1. All surfaces were coated with a two coats of **ARC S1PW** in alternating colors with a total DFT of 20-25 mils (500-630 µm)



ARC S1PW applied to exteriors of ductwork

## Results

### Client Reported

- After 18 months in service the coating shows no sign of attack other than staining which is removed with a water wash
- Client expects lining system to last >5 year and reports an annual savings of >\$50,000 due to elimination of annual maintenance painting

\$=USD



ARC S1PW topcoat after 1 year in service