



# Florida Method of Test for Sampling of Structural Steel Existing Coatings Systems

Designation 5-564

## 1. SCOPE

- 1.1 This method covers field sampling of the existing coating systems of structural steel. The samples will subsequently be analyzed for lead and chromium by means of SW 846, Methods 3050 and 6010.

**WARNING:** Ingestion and inhalation of lead is hazardous to human health. Personnel should be trained in the proper use of safety equipment and the handling of hazardous materials.

## 2. EQUIPMENT

- 2.1 Mine Safety and Health Administration (MSHA) and National Institute of Occupational Safety and Health (NIOSH) approved  $\frac{1}{2}$  mask air purifying respirator with high efficiency particulate (HEPA) filter.
- 2.2 Gloves.
- 2.3 Protective Eyewear.
- 2.4 Tyvek suit.
- 2.5 Hammer.
- 2.6 Chisel.
- 2.7 Plastic, resealable sample catch bag.
- 2.8 Metal primer spray paint.

## 3. ADDITIONAL REQUIREMENTS



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September 1, 2000

- 3.1 Maintenance of Traffic as necessary.
- 3.2 Access equipment (e.g. bucket truck) as needed.
- 3.3 Sampling structures over water requires a rescue boat and personnel on site.
4. **REQUIRED SAMPLE QUANTITIES:**
  - 4.1 Minimum of four samples per coatings system.
  - 4.2 Minimum of 0.50 grams per sample.
5. **PROCEDURE**
  - 5.1 Using the hammer and chisel or equivalent tools to remove the paint film cleanly to the substrate. Samples shall be taken at random locations to achieve a representative sampling of the structure. Samples shall consist of paint scrapings, shavings, and chips with an absolute minimum of rust scale and debris. Only the minimum amount of coating required for a complete sample shall be removed. Excess sample may be hazardous waste and therefore shall be avoided. Collect a minimum of 0.50 grams of sample in the sample catch bag, seal, and label with the following:
    - a. Identification of the Project Site.
    - b. State Project Number (if applicable).
    - c. Date of Sampling.
    - d. Sample number (Bridge Number with alphabetic suffix is recommended, e.g. 720072-A, 720072-B, 720072-C, etc.).
    - e. Sample location (e.g. Span 2, Beam 3, north face).
    - f. Name of sampler.
    - g. Signature of sampler.
  - 5.2 Submit samples with chain of custody and request for testing form to a



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certified testing facility.

- 5.3 Apply a sufficient amount of sprayable metal primer to completely cover the substrate surface exposed by sampling.