EONCOAT[®] Surface Preparation Check List



Checklist

Abrasive blast clean following SSPC-SP 6/ NACE 3, Commercial Blast Cleaning.

Before abrasive blasting, remove all:

- loose scale
- oil
- grease
- dirt
- mill scale

Flash rust is allowed. The minimum surface profile required for EonCoat is 3 mil.

As an alternative to abrasive blasting, use water jetting (40,000 psi.) to remove the following:

- all loose scale
- deposits of oil
- grease
- cutting oils
- dirt
- coatings
- any other contaminants

Per SSPC-SP WJ1/NACE WJ-1 clean to bare substrate UHP WJ with 3.1.3 moderate flash rust.



Inspect the surface after abrasive blasting following SSPC-PA 17 and ASTM D4417 – i.e., confirm surface mil profile.



After dry abrasive blast cleaning, pressure wash to remove all blasting residues from the structure. (5,000 psi pressure washer with no detergent or chemicals.)



After pressure washing, blow-dry (with compressed air) any puddles, crevices, seams, and areas that may hold water.



The surface temperature of the substrate should be a minimum of 40°F (5°C) and a maximum of 110°F (43° C) to apply EonCoat.



CHECKLIST BREAKDOWN

Grit Blasting

A commercial blast cleaning of unpainted or painted steel surfaces using abrasives is required for EonCoat to protect the carbon steel asset. These requirements include the end condition of the surface and materials and procedures necessary to achieve and verify the end condition. A commercial blast-cleaned surface, when viewed without magnification, shall be free of all visible:

- oil
- grease
- dust
- dirt
- mill scale
- rust
- coating
- oxides
- corrosion products
- and other foreign matter, except for staining as noted

Water Jetting

Use waterjet cleaning to achieve the Clean to Bare Substrate (WJ-1) degree of surface cleanliness when the objective is to remove every trace of rust and other corrosion products, coating, and mill scale. Discoloration of the surface may be present. Waterjet cleaning does not provide the primary anchor pattern on the metallic substrate known as "surface profile." Therefore, the coatings industry uses waterjet cleaning primarily for recoating or relining projects with an adequate pre-existing surface profile. Note that waterjet cleaning does not remove mill scale.

NOTE: If there is no existing profile (3 mils or greater), proceed to abrasive blasting.

If you have any other questions please contact us at **754.222.4919**



CHECKLIST BREAKDOWN CONT.

Checking Surface After Blasting

• SSPC-PA 17, Procedure for Determining Conformance to Steel Profile/Surface Roughness/Peak Count Requirements: This new standard is intended for use by specifiers and contractors. It provides a method for determining whether the profile of a steel surface is in conformance with project specifications when using the instruments and procedures contained in ASTM D 4417 and D 7127.

• We have included requirements for frequency and location of instrument readings and evaluation criteria to ensure that the profile over the entire prepared surface complies with project requirements.

• The height of the surface profile can be a factor in the performance of various coatings applied to steel. For this reason, measure the surface profile before the coating application to ensure that it meets the specified requirements. The instruments described are readily portable and sufficiently sturdy for use in the field.

• Testex is the manufacturer of Press-O-Film replica tape. Press-O-Film provides inspectors and researchers with a simple way to obtain an impression of a surface. Press-O-Film (POF) consists of a layer of crushable plastic microfoam coated onto a polyester film of highly uniform thickness.

• When compressed against a roughened material, Press-O-Film accurately replicates details of its surface roughness. You may then study the impression in several ways. For example, a digital thickness gauge such as the PosiTector RTR can also field-measure profile and bridge the gap between tape grades by incorporating automatic linearization.

Pressure Washing Procedure

- Hold the pressure washer wand approximately 18 inches from the substrate you are washing.
- \cdot Keep the pressure washing wand at a slight angle to help remove debris.
- \cdot Flush the asset as evenly as possible, working a pattern so that you will not miss any area.
- \cdot Flush out all crevices, seams, and any areas that can hold any blasting media or contaminants.
- After pressure washing, blow dry any puddles, crevices, seams, and areas that may hold water.
- Use only clean and dry compressed air when drying. Air that is not clean and dry may re-contaminate the substrate, and you would have to repeat the pressure washing process.