

to the surface of the bare steel and the existing prime coat which has been exposed by feathering. The prime coat shall not be applied to the adjacent intermediate coat. The intermediate coat shall only be applied to the new prime coat and the existing feathered intermediate coat. The intermediate coat shall not be applied to the adjacent finish coat. The finish coat shall only be applied to the new intermediate coat and the existing finish coat which has been feathered or lightly sanded. The finish coat shall not extend beyond the areas which have been feathered or lightly sanded.

At the perimeter of the repair area, the first two coats shall be applied by brush. The finish coat shall be applied by either brush or spray.

It may be necessary to make several applications in order to achieve the proper thickness for each coat.

During the application of the prime coat, the paint shall be continuously mixed.

All surface preparation and painting shall still be done in accordance with the specifications. In lieu of abrasive blasting, alternate methods of surface preparation may be allowed.

All repairs shall be made in a manner to blend the patched area with the adjacent coating. The finished surface of the patched area shall have a smooth, even profile with the adjacent surface.

The Contractor shall submit his method of correcting runs in writing to the Director for approval.

**G. Continuity.** Each coat of paint shall be applied as a continuous film of uniform thickness free of all defects such as holidays, runs, sags, etc. All thin spots or areas missed shall be repainted and permitted to dry before the next coat of paint is applied.

**H. Dry Film Thickness.** Prime thickness, cumulative prime and intermediate thickness, and cumulative prime, intermediate and finish thickness shall be determined by use of Type 2 magnetic gage in accordance with the following:

Five separate spot measurements shall be made, spaced evenly over each 100 square feet (9 m<sup>2</sup>) of area to be measured. These measurements shall be taken on flanges, webs, cross bracing, stiffeners, etc. Three gage readings shall be made for each spot measurement of either the substrate or the paint. The probe shall be moved a distance of 1 to 3 inches (25 to 75 mm) for each new gage reading. Any unusually high or low gage reading that cannot be repeated consistently shall be discarded. The average (mean) of the 3 gage readings shall be used as the spot measurement. The average of five spot measurements for each such 100 square

foot (9 m<sup>2</sup>) area shall not be less than the specified thickness. No single spot measurement in any 100 square foot (9 m<sup>2</sup>) area shall be less than 80% of the specified minimum thickness nor greater than 150% of the maximum specified thickness. Any one of 3 readings which are averaged to produce each spot measurement, may under run or overrun by a greater amount. The 5 spot measurements shall be made for each 100 square feet (9 m<sup>2</sup>) of area as follows:

1. For structures not exceeding 27 m<sup>2</sup> (300 square feet) in area, each 100 square foot (9 m<sup>2</sup>) area shall be measured.
2. For structures not exceeding 1,000 square feet (90 m<sup>2</sup>) in area, three 100 square foot (9 m<sup>2</sup>) areas shall be randomly selected and measured.
3. For structures exceeding 1,000 square feet (90 m<sup>2</sup>) in area, the first 1,000 square feet (90 m<sup>2</sup>) shall be measured as stated in section 2 and for each additional 1,000 square feet (90 m<sup>2</sup>), or increment thereof, one 100 square foot (9 m<sup>2</sup>) area shall be randomly selected and measured.
4. If the dry film thickness for any 100 square foot (9 m<sup>2</sup>) area (sections 2 & 3) is not in compliance with the requirements of paragraph 1 of this section, then each 100 square foot (9 m<sup>2</sup>) area shall be measured.
5. Other size areas or number of spot measurements as specified in the contract plans shall be measured.

Each coat of paint shall have the following thickness measured above the peaks:

	Min. Spec. Thickness mil (µm)	Max. Spec. Thickness mil (µm)	Min Spot mil (µm)	Max Spot mil (µm)
Prime	3.0 mil (75 µm)	5.0 mil (125 µm)	2.4mil (60 µm)	7.5mil (188 µm)
Intermediate	5.0 mil (125 µm)	7.0 mil (175 µm)	4.0 mil (100 µm)	10.5 mil (263 µm)
Sub Total	8.0 mil (200 µm)	12.0 mil (300 µm)	6.4 mil (160 µm)	18.0 mil (450 µm)
Finish	2.0 mil (50 µm)	4.0 mil (100 µm)	1.6 mil (40 µm)	6.0 mil (150 µm)
Total	10.0 mil (250 µm)	16.0 mil (400 µm)	8.0 mil (200 µm)	24.0 mil (600 µm)

Film thicknesses greater than the maximum specified thicknesses that do not exhibit defects (such as runs, sags, bubbles, mudcracking, etc.) and for which the Contractor has received a written statement from the coating manufacturer stating that this excessive thickness is not detrimental, may remain in place at the discretion of the Director.

For any spot or maximum average thickness over 24 mils (600 µm) it will be necessary for