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.

H. 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.

I. 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^2) 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 feet (9 m^2) area shall not be less that the specified thickness. No single spot measurement in any 100 square feet (9 m^2) 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^2) of area as follows:
1. For structures not exceeding 300 square feet (27 m^2) in area, each 100 square feet (9 m^2) area shall be measured.

2. For structures not exceeding 1,000 square feet (90 m^2) in area, three 100 square feet (9 m^2) areas shall be randomly selected and measured.

3. For structures exceeding 1,000 square feet (90 m^2) in area, the first 1,000 square feet (90 m^2) shall be measured as stated in section 2 and for each additional 1,000 square feet (90 m^2), or increment thereof, one 100 square feet (9 m^2) area shall be randomly selected and measured.

4. If the dry film thickness for any 100 square feet (9 m^2) area (sections 2 & 3) is not in compliance with the requirements of paragraph 1 of this section, then each 100 square feet (9 m^2) 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	Max. Spec. Thickness	Min. Spot	Max. Spot
Prime	75 µm (3.0 mil)	125 µm (5.0 mil)	60 µm (2.4mil)	188 µm (7.5mil)
Intermediate	125 µm (5.0 mil)	175 µm (7.0 mil)	100 µm (4.0 mil)	263 µm (10.5 mil)
Sub Total	200 µm (8.0 mil)	300 µm (12.0 mil)	160 µm (6.4 mil)	450 µm (18.0 mil)
Finish	50 µm (2.0 mil)	100 µm (4.0 mil)	40 µm (1.6 mil)	150 µm (6.0 mil)
Total	250 µm (10.0 mil)	400 µm (16.0 mil)	200 µm (8.0 mil)	600 µm (24.0 mil)

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 the Contractor to prove to the Department that the excess thickness will not be detrimental to the coating system. This shall be accomplished by providing the Director, for approval, certified test data proving that the excessive thickness will adequately bond to the steel when subjected to thermal expansion and contraction. This thermal expansion and contraction test shall take place over five 5 cycles of a temperature ranges from -20 ^{0}F to 120 ^{0}F (-29^{0}C to 49 ^{0}C). After the thermal contraction and expansion cycles have taken place, the tested system shall be subjected to pull off tests and the results compared to the results of pull off tests which have been performed on a paint system with the proper thicknesses. In addition to the certified test results, it will also be necessary for the Contractor to provide the Director a written statement from the paint manufacturer stating that this excessive thickness is not detrimental.

If the Director does not approve the excessive coating thicknesses or the Contractor elects not to provide the required written statement from the paint manufacturer and the certified test results when required, the Contractor, at his own expense, shall remove and replace the coating. The removal and replacement of the coating shall be done as specified in 815.08 G Repair Procedures.

815.09 CAULKING QCP #7.
Caulking is required to fill all gaps and crevices greater than 1/8 inch (3 mm). Caulking shall take place after either the prime or intermediate coat has cured and prior to the application of the finish coat. Caulking will be included with the intermediate coat for payment.
The material shall be a two component, 100% solids epoxy and shall be one of the following:

MANUFACTURER	
Mark 270 Poly-Carb Solon, OH 216-248-1223	KOP-COAT A-788 Splash Zone Compound Carboline Company Hamilton, OH 513-896-1919
Sikadur Injection Gel Sika Chemical Corp. Lyndhurst, N.J. 201-933-8801	Or Other Commercially Available, 100% Solid, Non-Sag, Non-Shrink Epoxy Based System Capable Of Filling Voids Up To 1 inch (25 mm) Wide

815.10 SAFETY REQUIREMENTS AND PRECAUTIONS. The Contractor shall meet the applicable safety requirements of the Ohio Industrial Commission and the Occupational Safety and Health Administration (OSHA), in addition to the scaffolding requirements specified below.

The Material Safety Data Sheets (MSDS) shall be provided at the preconstruction meeting for all paints, thinners and abrasives used on this project. No work shall start until the MSDS has been submitted.

815.11 INSPECTION ACCESS. In addition to the requirements of 105.11, the Contractor shall furnish, erect, and move scaffolding and other appropriate equipment, to permit the Inspector the opportunity to closely observe all affected surfaces. This opportunity shall be provided to the Inspector during all phases of the work and continue for a period of at least 10 working days after each structure has been completely painted.