What Does “Nominal Film Thickness” Mean?

How should a contractor respond when he reads a specification requirement that “the nominal dry film thickness of the coating shall be 3 mils”?

From Roy Bradley
Laing O’Rourke
Reference to “nominal” dry film thickness (DFT) in paint specifications recognizes the fact that a variation in film thickness is inevitable. The specification should qualify “nominal” by stating that over any square meter, the average of dry film thickness measurements taken should equal or exceed the nominal thickness, and no reading should be less than, say, 80% of the nominal thickness. If this qualification is not included in the specification, then it would be prudent for the contractor to confirm and, perhaps, feel justified in suggesting, say, 70% of the nominal thickness based on an experienced assessment of the paint system’s capability. Wet film thickness gauge monitoring should be an expected quality control measure.

From John Linder
Odle, Inc.
Nominal means “of or relating to” or “approximate.” As stated, this would be taken to mean a “target” DFT with the understanding that there is some variation in the coating application process. However, I would recommend that you refer to the coating manufacturer’s application data sheet for the coating being applied. If 3 mils’ DFT is listed as the minimum, then you should make the 3 mils’ DFT the absolute minimum. In other words, do not violate the manufacturer’s parameters as listed on the data sheet. I have seen many specifications where engineers or specifiers wrote “nominal” when they meant minimum, and the application data sheet of the coating confirmed it. Most specifications also have an all-inclusive escape clause for the specifier stating that the more stringent of the conflicting information will prevail.

From Chao Wei
ABS
Nominal DFT is a minimum total dry film thickness of the coating system after it has dried and cured. Thickness measurements shall follow a certain rule, for example, a 90/10 rule (90% of all measurements shall be greater than or equal to 3 mils and none of the remaining 10% of measurements shall be below 90% of 3 mils or 2.7 mils). Measurement check points and maximum DFT allowed should also be specified in the coating specification.

From Wayne Salisbury
Conproco Corp.
I would ask the coatings manufacturer what wet film thickness is required to achieve 3 mils dry, then have my applicators use a wet film gauge to certify that we were applying the coating to specifications.

From AJ Holst
Holston Supply
Nominal for me as a distributor means the minimum necessary to achieve performance characteristics. While the specification may give some leeway to the installation contractor, it is my responsibility to educate the contractor on what the minimum DFT is for the particular product, based on the application.

From Mike Hyde
Global Coatings Inc.
I have always understood nominal to be the target DFT and would expect it to be in the 80% under and 20% over range. However, I always ask my customer the intent, and most often the response is that nominal means minimum.

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- What is the best way to remove thick film elastomers from floors and ship decks?
- Animal fat in slaughterhouses often penetrates concrete surfaces. If the fat is not removed before the concrete is coated, the fat can cause the coating to fail. How do you identify and remove the contamination before coating the concrete?

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