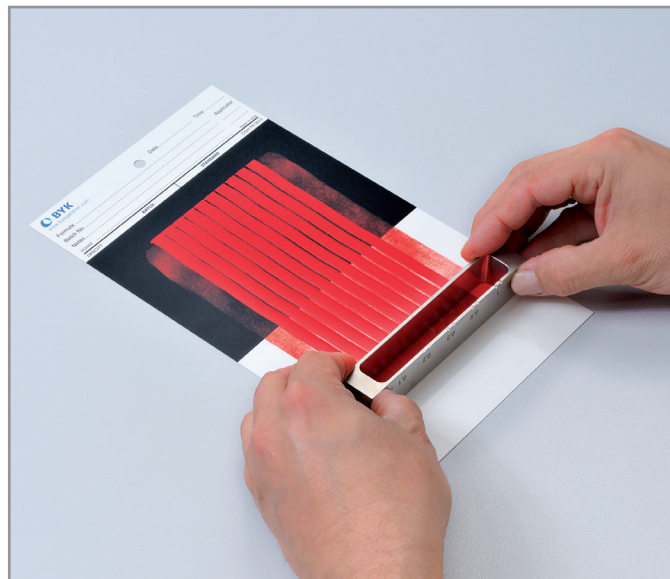


Leveling / Sagging Applicators

In most cases, leveling is a desired property of paints expressed in the fact that the cured film shows a surface as plain as possible with brush marks, spray drops or other unevenness occurring as little as possible. Sagging, however, is considered a paint defect, particularly occurring on vertical surfaces, in edges and corners. The most common terms, for example streaks or tear drops, perfectly describe its characteristic appearance. It is not always possible, or only with difficulties, to measure this type of flow behavior by means of viscometers.

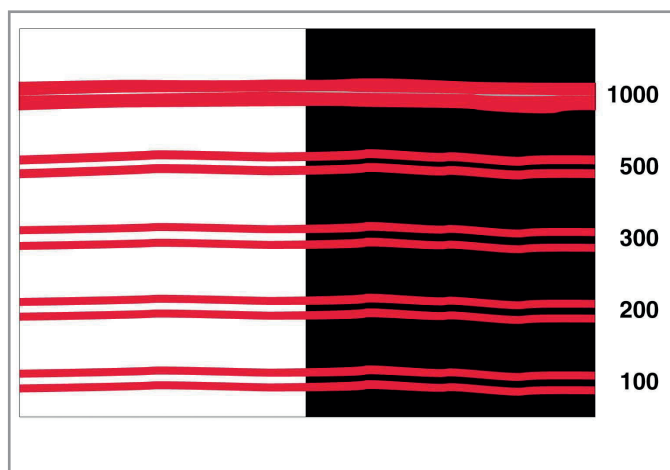
- Simple comparison test of the leveling and sagging properties of paints in the period between application and drying
- One applicator to test leveling and sagging
- Corrosion resistant stainless steel construction



Leveling Test Procedure

Draw the paint to be tested over a plane substrate (test chart), producing 5 pairs of streaks of various film thicknesses

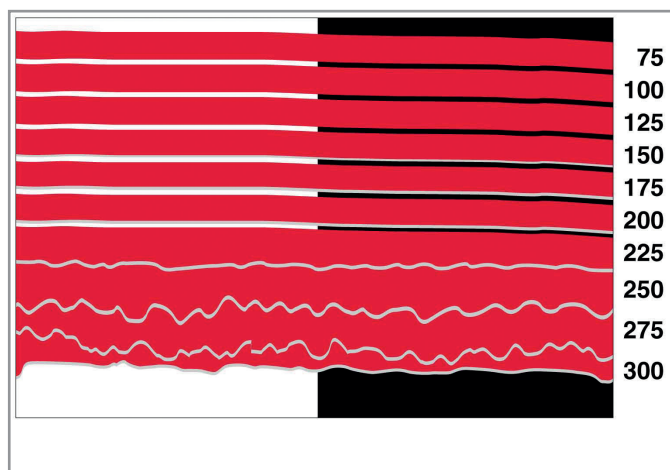
- Hold the test panel in a horizontal position, and observe which of the pairs of streaks converge
- Generally, the gap depth of that pair of streaks is indicated, where the intervals between the streaks are slightly visible



Sagging Test Procedure

Apply the coating, forming 10 streaks of various thicknesses

- Immediately after application, place the test panel into a vertical position, with the thinnest film streak at the top, avoiding any shock
- Depending on the sagging tendency the separate streaks converge
- For a reproduction of the results, which is difficult anyway, it is important to work under constant climatic conditions, to apply film streaks uniformly, and to set a time for evaluation



NYPC Leveling Test Blade

This instrument provides a means of evaluating the ability of a freshly applied coating to level before curing while reducing or eliminating marks caused by brushing or other means of application. Evaluations of leveling using this specially designed applicator correlate with, but are more consistent than, evaluations done by brushout. Since different factors influence leveling and sagging, tests for these properties should not be confused with each other. The leveling test is performed on a horizontal plane and is not a measure of sagging. The New York Paint Club (NYPC) Leveling Test Blade is a U shaped film applicator with a shallow gap cut into one edge. Into this shallow gap is cut an evenly spaced series of five pairs of narrow notches having total clearances of 10, 20, 40, 80 and 160 mils. The applicator will produce a 4" wide drawdown, and has an overall width of 5".

A drawdown is made on a panel or chart using normal procedures. This produces five parallel pairs of ridges with a very thin (<0.5mil) distance between them. The drawdown is kept flat on a horizontal plane until the coating is dry and it is then evaluated. Leveling is rated on the basis of which ridge pairs of coating merged together and to what extent.>



Leveling Test Blade

The Leveling Test Blade is designed to comply with ASTM method D 4062 to measure the leveling properties of water and solventbased architectural coatings. The leveling blade creates parallel ridges to simulate brush marks. After the coating dries the drawdown is compared to plastic leveling standards. The leveling test bar is a cylinder rod with alternating gap clearances of 100 and 300 microns (4 and 12 mils). Plastic side arms are a guide to maintain a straight blade movement.



Standards

ASTM D2801, D4062
FTMS 141a
Method 4494
NYPC 44 (32)
NYPC 430, p. 1435

Catalog Number	Short Description	Gap Clearance	Measurement Unit	Weight				Dimesions: L x W x H	
0810	Leveling/Sagging Tester	For leveling test: 0.1, 0.2, 0.3, 0.5, 1.0 mm For sagging test: 75, 100, 125, 150, 175, 200, 225, 250, 275, 300 µm	microns						
0812	NYPC Leveling Test Blade	For leveling test: 10, 20, 40, 80, 160 mils	mils	0.34 kg	0.75 lb	12.7 x 4.5 x 3.2 cm	5 x 1.75 x 1.25 in		
0813	Leveling Test Blade	For leveling test: 4, 12 mils	mils	0.5 kg	1.2 lb	18.5 x 10 x 2.5 cm	7.25 x 4 x 1 in		

Delivery Content

Applicator
Reusable Storage Case

Catalog Number	Short Description	Delivery Content
11210	Glass Drawdown Plate 14" X 16"	
4262	Drawdown Plate, Glass	
3876	Vacuum Plate S, black anodized, 9x12"	Vacuum plate 2 x Hose fitting (one to fit 1/4" tubing and one for 3/8" tubing) Rubber footings
3882	Vacuum Plate, Stainless Steel 9x12"	Vacuum plate 2 x Hose fitting (one to fit 1/4" tubing and one for 3/8" tubing) Rubber footings
11205	Vacuum Plate, Aluminum 12x18"	