

Spraying Orange Peel



Q I'm trying to spray your Hydrocote Resistane with my HVLP system but I keep getting orange peel. What's wrong with this stuff?

[Orange peel describes a dry finish film textured with small bumps and craters, very much like the skin of most citrus fruits.]

A You're looking at the wrong end of the gun, dude. The good news is that there's nothing at all wrong with the finish, and you'll be able to get it working well right away. Orange peel is probably the most common HVLP finishing problem we hear about—and it's also the easiest problem to solve. There's about a 99% probability that you're simply holding the gun too far from whatever you're finishing. Your orange peel problem will disappear the instant you begin spraying 6" or less from the surface.

Relatively warm air from your turbine, together with HVLP's gentle delivery, makes finishes behave a little differently than they do when sprayed from a typical compressed-air spray gun. If you give the tiny droplets of atomized finish emerging from your gun too much air time, they fail to merge thoroughly and flow out smoothly after they finally arrive on a surface. Keep the transit time short, and the finish flows out beautifully, curing to a smooth, uniform surface.

At risk of creating terminal confusion, we should acknowledge that we've used the term "orange peel" to describe a desirable condition in water-based finishing—though of course we're not talking about a rough cured surface. One sure sign of satisfactory wet coat thickness is slightly stippled texture (like orange peel) in the freshly applied wet film. A completely smooth standing puddle of finish is almost certainly much too thick; it will not dry quickly and reliably, and it may cause real problems with subsequent coats. When a fresh wet film looks like an orange peel, it will flow out smooth within minutes and then dry rapidly, providing a sound base for further coats.