

Paint Stripping Trial
March 2, 2007
Kevin Brubaker and Jason Brubaker
(Report prepared by Michael O. Hunt 3/4/07)

Kevin Brubaker and Jason Brubaker of Kevin's Painting, Lafayette, Indiana, completed a paint stripping trial using the Paint Shaver® on March 2, 2007. Kevin Brubaker, a professional painter, learned of the Paint Shaver at the June 10, 2007, Painting/Repainting Workshop held in Lafayette, Indiana. Mr. Brubaker was in the process of preparing a bid for repainting a large Queen Anne House in Lafayette. He reviewed the production rate information (Sept. 19 and Oct. 25, 2006 trials) for stripping with this tool that was posted on the website at the time of his inquiry. He was encouraged by these results and expressed interest in obtaining first hand experience with this technique before submitting his bid.

The objective of the trial was to strip all paint and leave the surface ready for application of a paintable water-repellent preservative.

Weather: 34° F wind 30-40 mph overcast.

The Brubakers were instructed in the use of the Paint Shaver by Robert R. Leavitt and Michael O. Hunt. The minimum depth of cut (approx. 1/32-in.) was obtained by trial.

Location: 928 State Street, Lafayette, Indiana 47905. The project is a large, wood-framed and sided, 3 story 1890s Queen Anne house. The house was vacant. It had last been used as an 8 unit rental.



Condition: In general the house was in poor repair. The heavy accumulation of multiple coats of oil-base paint was peeling, flaking and cracking extensively.



Overall view and close-up views of paint condition

Prior to the Paint Shaver trial the condition of the paint was tested by scraping with carbide-tipped scraper. Flaking and peeling paint was removed, but much intact paint remained. It was apparent that the intact paint would, in time, chip and flake as well.



The bottom two laps were vigorously scraped with carbide tip scrapper.

Trial 1

Area: 4 laps of 3-3/8-in. wide siding 7 ft. long = 7.875 sq. ft.

One lap was pine and the other 3 are yellow poplar (mostly heartwood). In general the paint adhered to the yellow poplar better than to the pine. All wood was in sound condition.

Set nails	5 min.
Shave off paint	11 min. 44 sec.
Power sand	<u>8 min. 17 sec.</u>
Total	25.02 min.

Production rate = 25.02 min/7.875 sf = **3.18 min/sf**

Note: Both the Paint Shaver and 5-inch Mikita disc sander were attached to a shop vac. The sander was equipped with an American International Tool suction head attachment.



Paint Shaver® top and high-speed disc sander with suction head attachment bottom both attached to vacuum

Trial 2

Area: 8 laps of 3-3/8-in. wide by 7 ft. long = 15.75 sq. ft.

All siding was pine in sound condition

All the paint in this area was badly cracked, peeling and flaking. It was originally thought that only the power sander was needed to strip this area to bare wood. After a brief trial with the sander it was decided to use the Paint Shaver.

Set nails	15 min.
Shave paint	8 min. 40 sec.
Power sand	<u>5 min. 20 sec.</u>
Total	29 min

Production rate = 29 min/15.75 sf = 1.84 min/sf

It was observed that the Brubakers quickly adapted to the use of the Power Shaver, so the increased productivity from Trial 1 to Trial 2 naturally reflected their increased familiarity. But it has also been noted the paint in Trial 1 was more tightly held than in Trial 2.

The average production rate = $(3.18 + 1.84)/2 = 2.51$ min/sf.



Jason Brubaker and Kevin Brubaker inspecting stripped siding. Note the bottom three laps are yellow poplar and the top nine laps are pine. The stripped siding is now ready for treatment with a paintable water repellent preservative.