

Polyester plastic fibres act as a strengthening agent in Tonecraft's dry-strippable wallpaper. (Photo: Bruce Kane, NRC)

While easy peeling from the wall was the end in view, first they had to make the paper stick. Old-fashioned wallpapers require the separate application of glue — a task formidable enough for most people to turn to professionals to do the job. Since the purpose was to help the home decorator, Johnston put his chemistry background to work developing the proper adhesive. Given normal household conditions which range from dry living and dining rooms to moist kitchens and bathrooms, a very special adhesive was required. The glue must also allow the decorator to drop a roll of paper into a trough of water and successfully apply it with little more assistance than a smoothing sponge. It must resist the soaking, yet be persistent enough to guarantee a smooth, finished appearance and remain firmly in place under varying household conditions until someone wants to peel the paper. In that event the adhesive then has to surrender completely and leave no evidence of its passing on the wall.

When Johnston and his team came up with a satisfactory combination of paper and glue, they then turned to the development of the necessary inks. Although many companies are content to import inks for printing, Color Your World decided not to rely on outside sources. Despite long ex-

Les fibres de polyester servent d'agent de renforcement pour le papier peint Tonecraft à décollement à sec. (Photo: Bruce Kane, CNRC)



Preheating the vinyl before embossing. (Photo: Color Your World)

Le vinyle est chauffé avant d'être frappé. (Photo: Color Your World)

perience in color mixing for paint, the two chemistries are different and new formulas had to be created.

By the mid-winter of 1977, although he would have liked to perform "just a few more tests", the new wallpaper was ready for the Canadian market. Acceptance by the consumer was immediate and enthusiastic. It is a matter of some pride to the research team that the many hours spent in the laboratory were reflected in satisfactory results under home conditions. Apartment dwellers in particular found the wallpaper a fulfillment of a long-standing need. That market was even better served when the team was able to apply much of what they had learned during the year's hard work. With continuing support from the original IRAP grant, the team introduced further innovations during the next two years. New lines were created — some at lower cost and others with fresh decorating ideas including an embossed design in vinyl over the inked patterns. All the new products were based on the dry-strippable concept as a fundamental decorating convenience.

A recent innovation by Color Your World may be the ultimate step in wall-paper technology. Their latest line is a wall-paper based on mylar, one of the toughest plastic films known. Its strength is an obvious asset to dry stripping, and the metallic surface of the plastic means further innovation in decor.

Cost reduction is paramount in a highly competitive business such as home decorating. The company has managed to achieve a healthy position by keeping much of their technology within the factory. Besides the inks and coating techniques, they provide the designs for the rollers for the big six-color press that prints the patterns and embosses the vinyl. Retention of so many aspects of the production chain of operations has led the company to increase the physical size of its operations by more than 30 per cent. Production of paper has reached six million rolls annually, and wallpaper experts are expanding into New York this year.

Color Your World Inc. has provided the home decorator with myriad opportunities to enhance his household environment. Apartment dwellers may now establish their own taste in decoration without imposing an additional burden of time and expense on apartment house management. This has been accomplished at competitive cost through the application of modern technology to an old craft without sacrificing quality. According to Johnston, some side benefits also accrued "through the excellent working relationship we developed with the paper industry. Our testing program and market analysis has been a help to them as well, and they have responded with some useful suggestions for industrial papers. IRAP support proved a 

Stephen A. Haines