QUICK DRYING HIGH PERFORMANCE ADHESIVE

2011 Nova Award Nomination 8

"Innovation Description" — Attach one (one only) 8-1/2" X 11" page that gives a succinct description of the innovation, in searchable text (not text in a figure). Put the name of the innovation at top of page. Provide the following specific information. Without it, the Jury cannot evaluate and seriously consider your nomination.

Loctite (US) / LePage (Canada): PL Premium Advanced

PL Premium ADVANCED is an innovation in the construction industry representing a major breakthrough in the drying time in the formulation and within the product category. Since the launch of PL Premium ADVANCED in mid-2010, the construction industry has experienced significant time savings and efficiency improvements in their adhesive related projects. It has been estimated that time savings are in the realm of 25%-50%.

Making polyurethanes dry quickly had previously been a big challenge and slowed construction work as various projects required bracing and time to set. The innovation is a result of Loctite/LePage asking customers and contractors what would make the biggest impact in their projects – all the performance of PL Premium but with time savings from faster setting. The company spent 12 months developing and testing different formulations – the chemical challenge was significant and the product had to be quite dramatically altered. The result is a construction adhesive, PL Premium ADVANCED, that has **4x more initial grab**, is **repositionable**, and **quick drying**, dramatically minimizing the need for bracing and time consuming setting. The product comes with another added benefit – low VOCs, contributing to better **air quality** and **LEED certification** on projects.

PL Premium ADVANCED was developed in the United States and launched in the Spring / Summer 2010 in both Canada and the United States.

First year sales of PL Premium ADVANCED have broken all previous records in the 125 year history of the company. A global rollout of PL Premium ADVANCED is planned next.

Endorsements:

Mike Holmes, a Canadian professional contractor best known for his television show Holmes on Homes: "PL Premium ADVANCED represents what happens when a company actually listens to its customers. It brings together what construction trades really required to save time while not sacrificing quality – an adhesive with exceptional performance that is both repositionable and rapid setting. It is a major time saver and is resulting in great quality work. It has the added benefit of being low in VOCs which is good for air quality and contributes to LEED certification."

Gord Cooke, Building Scientist, Air Solutions: "PL Premium Advanced is a great accomplishment, increasing the efficiency and performance of adhesive related construction work. It is very difficult to make polyurethanes quick drying but Loctite/LePage achieved it with PL Premium ADVANCED while at the same time improving its performance and environmental sustainability. I'd estimate that the efficiency improvement on the average adhesive related construction project is between 25% and 50%."

Background: LePage PL Premium ADVANCED is a revolutionary construction adhesive that provides superior results and is safe to use. It may be used inside or outside and will last as long as the surface it joins together. PL Premium ADVANCED is 100% polyurethane and is 3 times stronger than traditional construction adhesives. It has 4 times the Initial Grab than the original PL Premium formulation, is still repositionable and is virtually VOC free. Bonds most common construction materials such as wood, treated wood, hardwood flooring, concrete, stone, marble, slate, masonry, brick, foam insulation of all sorts, carpets, metal, lead, cement-based products, ceramics, fiberglass, drywall and mirrors.

Features:

- 4x more Instant Grab than Original PL® Premium Construction Adhesive
- Virtually VOC Free: < 2% by weight (22 g/L)
- Meets and exceeds APA AFG-01: Bonds to wet, frozen or treated lumber
- Up to 3x the strength and 2x the coverage of traditional adhesives
- · No strong solvent odour; Excellent for indoor projects

Recommended For: Bonding most common construction materials such as wood, treated wood, hardwood flooring, concrete, stone, marble, slate, masonry, brick, foam insulation of all sorts, carpets, metal, lead, cement-based products, ceramics, fiberglass, drywall and mirrors.

About Loctite / LePage

LePage's long history of innovation in Canada started in 1870, when William N. LePage of Prince Edward Island rediscovered the art of making fish glue. His effective, ready-to-use adhesive could be kept in storage for months. He formed the LePage company in 1876 and it quickly became the trusted choice of both consumers and construction professionals.

Loctite / LePage products are developed and marketed by Henkel Corporation, part of Henkel, a worldwide leader in adhesives and a European leader in laundry/home care and personal care products. Henkel's North American consumer adhesives brands include Loctite®, LePage® (for Canada only), and Pritt® brands.

Henkel is ranked among the 20 most sustainable companies amongst the global fortune 500, and for the fourth consecutive time has been recognized as sector leader in the Dow Jones Sustainability World Index (DJSI World) and the Dow Jones Sustainability Europe Index (DJSI Europe). In North America, Henkel has approximately 5,700 employees working in more than 50 facilities across the U.S. and Canada.

QUICK DRYING HIGH PERFORMANCE ADHESIVE

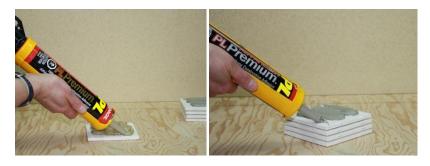
2011 Nova Award Nomination 8

"Innovation Illustration" — Attach one (one only) 8-1/2" X 11" page that contains one or more photographs, drawings, graphs, clauses, etc. that visually describe the innovation. Do not submit more than one page of visuals. The Jury will see only one page for review. Put the name of the innovation at top of page. If possible, enclose one set of computer files (jpg, gif, tif, or png files) and/or original prints of visuals to be exhibited on the CIF web site, <u>www.cif.org</u>.

PL Premium and PL Premium Advanced Tile Test to illustrate product breakthrough



Application of PL Premium and PL Premium Advanced to tiles (one tile for PL Premium and three tiles for PL Premium Advanced)



Application of tiles to wall using PL Premium and PL Premium Advanced illustrating the breakthrough in drying time in the formulation and within the product category Making polyurethanes dry quickly had previously been a big challenge and slowed construction work as various projects required bracing and time to set. The

innovation is a result of Loctite/LePage asking customers and contractors what would make the biggest impact in their projects required blacing and time to set. The but with time savings from faster setting. The company spent 12 months developing and testing different formulations – the chemical challenge was significant and the product had to be quite dramatically altered. The result is a construction adhesive, PL Premium ADVANCED, that has **4x more initial grab**, is **repositionable**, and **quick drying**, dramatically minimizing the need for bracing and time consuming setting. The product comes with another added benefit – low VOCs, contributing to better **air quality** and **LEED certification** on projects.

