Edison Coatings, Inc.

RESTORATION LATEXES:

RL-1, RL-2, RL-3, RL-4, RL-5, RL-6, RL-7

RL-1 TROWEL GRADE

RL-2 CASTING GRADE

RL-3 MARINE GRADE

RL-4 HIGH PERMEABILITY GRADE

RL-5 HOT WEATHER GRADE

RL-6 COLD WEATHER GRADE

RL-7 SCULPTING & HIGH BUILD

RESTORATION LATEXES:
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DESCRIPTION:

RL-Series latex modifiers are unique reactive acrylic additives designed to enhance the performance of Portland cement based materials. ***RL-Series*** latex admixtures are acrylic based, non-yellowing, film forming compounds which do not re-emulsify following cure.

When added to cement based mortars, patches, plasters and coatings, ***RL-Series*** latex modifiers improve mechanical performance, workability, adhesion and resistance to harsh environmental exposures including freeze-thaw. They overcome the limitations of conventional acrylic modifiers, developing and retaining performance even when wet and avoiding surface skinning to extend surface working time.

RL-1 is a general purpose reactive acrylic modifier which combines excellent mechanical properties with superior workability for **trowel-applied** mortars, patches, coatings and cement plasters. It provides extended working time and positive through-setting at any depth.

RL-2 is a superplasticized modifier for use in **casting and coating** applications.

RL-3 is a **chemical resistant**, highly reactive latex grade intended for tough industrial and marine exposures, or where high moisture or **immersion** services are planned.

RL-4 is a latex modifier which provides **high permeability** to repair mortars and plasters, for use in applications where extended permeability is required.

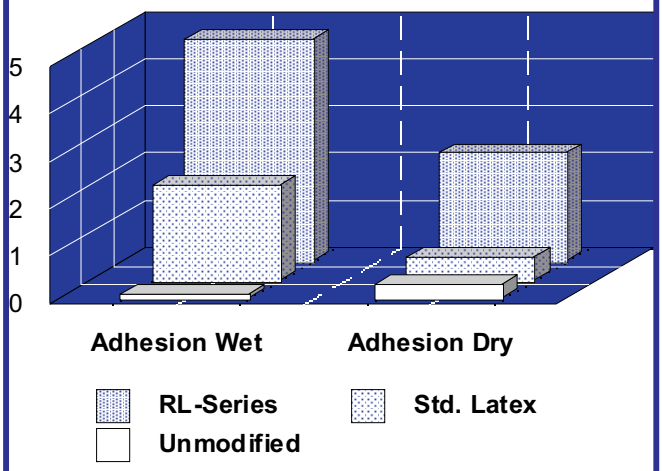
RL-5 is a **hot weather** modifier which provides extended working times and improved resistance to skinning when working under hot, dry conditions.

RL-6 is a cold weather modifier, incorporating a set accelerator to compensate for cold weather effects on set time and to improve resistance to freezing when working under cold, damp conditions.

RL-7 is a modifier formulated to form a gel when mixed with cementitious mortars, allowing application of deep repairs up to 3" (7.6 cm) in a single lift. It also allows up to 24 hours' sculpting time.

In some cases, hybrids and additional special grades can be produced on a custom basis. For example, An ***RL2/3 hybrid*** would provide both superior chemical resistance and high flow. An ***RL-4/5 hybrid*** would provide both high permeability and enhanced hot weather workability. Consult your Edison Coatings Technical Representative for recommendations on special grades.

Fig. 1: Adhesion, Wet & Dry

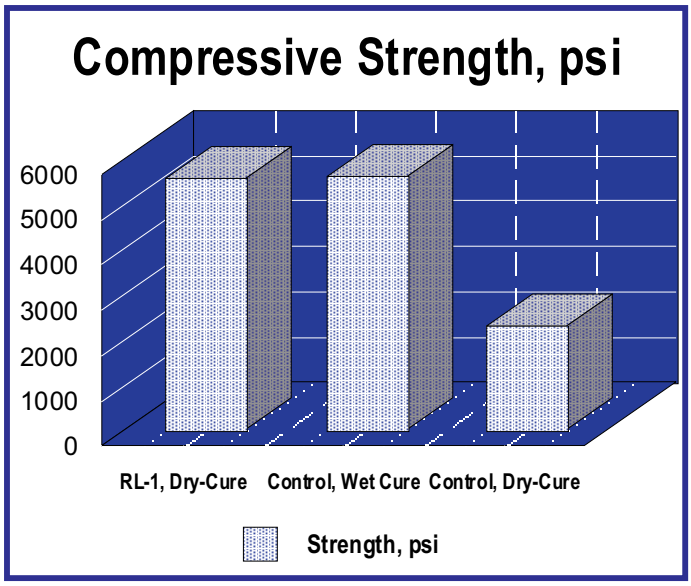


PERFORMANCE CHARACTERISTICS

Adhesion: ***RL-Series*** latex modified mortars develop superior adhesive (tensile) bond strength compared with both unmodified mixes and conventional acrylic modifiers, and retain higher bond strength under immersion conditions. *(See Figure 1).*

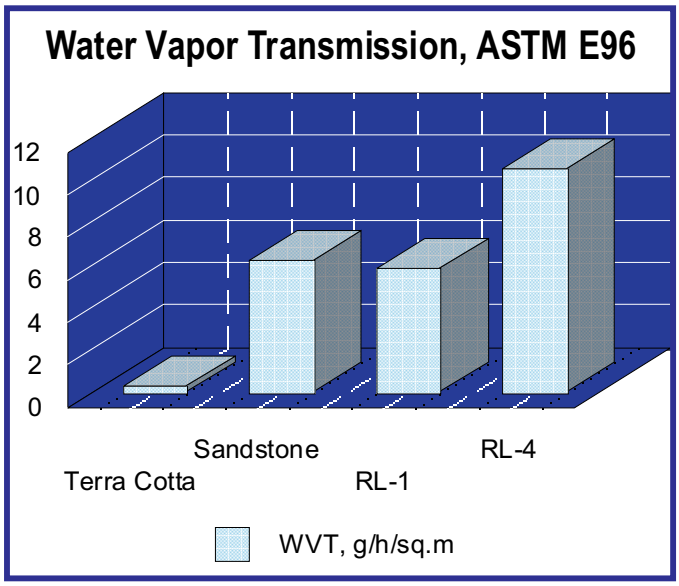
Flexural Strength: The polymer-cement co-matrix which forms in acrylic latex modified mortar increases the overall binding capacity of the cement and lowers the Modulus of Elasticity. This results in higher flexural strength. A portion of the gain is due to the synergistic effect of the latex-cement co-matrix, while additional gains are due to the ability of the composite to deform under load and relieve stress.

Compressive Strength: ***RL-Series*** latex modifiers do not alter compressive strengths of the mortars, and they retain their strength better under wet conditions.



mortars, patches and plasters to which they are applied. Compressive strength is determined by the mix design of the cement-based material to which the latex modifier is added. Latex modifiers simply assure that mixes will reach the intended design strength *without the necessity of wet curing.*

Tensile Strength: ***RL-Series*** modified mortars develop higher tensile strength than either unmodified or standard acrylic latex modified



Moisture Vapor and Liquid Moisture Transmission: ***RL-Series*** latex modifiers are balanced to provide the optimum combination of positive moisture vapor transmission, liquid water transmission and weather resistance. The results include patches and toppings which do not entrap water or moisture vapor, while maintaining their ability to withstand wet/dry and freeze/thaw cycling. For applications requiring exceptional permeability, such as retaining walls, ruined masonry and open tower structures, ***RL-4*** produces levels of both liquid and water permeability substantially higher than typical masonry substrates.

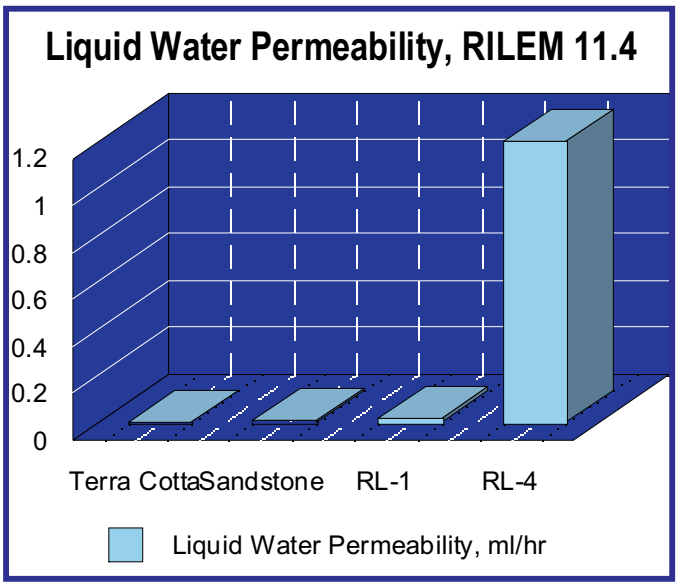
Workability: ***RL-Series*** modifiers are "through-setting", providing positive set in any depth, even when still wet. This provides greater installation ease in thick sections and deep castings.

Water Resistance: All ***RL-Series*** modifiers incorporate wet adhesion monomers to allow development of high bond strength to wet surfaces, allowing application to wet substrates.

Chemical Resistance: Although latex-modified cement based repair systems cannot approach the levels of chemical resistance offered by Edison polymer concretes such as ***FLEXI-TOP 550 and 555 and FLEXI-MATRIX 545*** epoxy-based repair systems, ***RL-3*** offers improved resistance to dilute acids and oils as compared with unmodified concrete. In applications such as industrial floor repair prior to coating with more highly chemical resistant ***FLEXI-GARD 500*** epoxy coatings, the use of ***RL-3*** modified mortars offers substantial cost benefits over epoxy mortars. In exterior applications, or where temperatures vary widely, and particularly where repair areas are large and deep, ***RL-3*** modified mortars also offer better thermal compatibility with host concrete substrates than epoxy-based repair systems.

Freeze-Thaw Resistance: Mortars mixed with diluted (1:1) ***RL-Series*** modifiers develop exceptional freeze-thaw resistance, even under ponded water conditions and in the presence of de-icing salts.

Cure: Like conventional acrylic latex modifiers, ***RL-Series*** modifiers eliminate the need for wet curing under most conditions. The ability to reach design strength under ambient ("dry cure") conditions is even further improved in ***RL-Series*** products**,** which may be dry-cured under hotter, lower humidity conditions than standard latexes.



APPLICATIONS & COMPATIBLE MIXES

RL-Series modifiers can be used in a wide variety of applications from architectural repair to industrial flooring.

For ***architectural repairs***, use ***RL-1*** for trowel-applied patches to stone, masonry or concrete using an appropriate ***Custom SYSTEM 45*** mortar. Castings may be made using ***Custom 45 & RL-2.***

For repairs to **concrete** floors, decks and other traffic surfaces, use ***RL-1 or RL-2 & Deck-Top 47.*** For vertical/overhead concrete repair, use ***RL-1 & SYSTEM 44-V/O-NP.***

For ***marine concrete repair,*** repairs to fountains, pools, tanks and other water-containing structures, use ***RL-3*** with ***SYSTEM 44-NP, Deck-Top 47 or Macro-Patch 48.***

For mortars that are highly resistant to water, freeze-thaw and deicing salts use ***RL-1, RL-3, RL-5 or RL-6*** in a 1:1 dilution with water and the appropriate grade of ***SPEC JOINT 46*** Cement-Lime mortar, ***ROSENDALE 12M*** natural cement mortar or ***BioMix 35*** natural hydraulic lime mortar.

For additional information and recommendations, consult your Edison Coatings Technical Representative.

FOR COMMERCIAL & INDUSTRIAL USE ONLY.

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Edison Coatings, Inc.

3 Northwest Drive, Plainville, CT 06062

Phone: (860) 747-2220 or (800) 341-6621 **Fax: (860) 747-2280**

E-mail: edisoncoatings@outlook.com **Internet: www.edisoncoatings.com**