# CONTROL OF LEAD PAINT HAZARDS - USE OF ENCAPSULANTS

**The use of encapsulants is a new technique to prevent exposure to lead-based paint. The instructions and guidance of the manufacturers must be followed to test, prepare and apply these products.**

**What are encapsulants?**

- Encapsulants are materials that are applied over lead-based paint to seal the paint to a surface and prevent the release of paint chips or dust. The material may be either a liquid or an adhesive. Encapsulation provides a barrier between the paint and the environment. *Conventional paint is **NOT** an encapsulant.*

**How do encapsulants work?**

- Encapsulants cover lead paint so that the paint cannot produce dangerous dust and humans cannot come contact with it.
- Encapsulants work best on clean, dry and solid surfaces.

- Encapsulants cannot be used on:
  - Surfaces which are walked on;
  - Surfaces which rub together;
  - Surfaces which are badly deteriorated.

**Are encapsulants all the same?**

- There are three types of encapsulants:

  - There are polymers (chemical compounds) that form a flexible, resilient membrane. They are applied with a brush, roller, or airless spray gun.

  - There are epoxy or polyurethane polymers that form a membrane with a hard, but flexible, surface. They are applied with a brush, roller, or airless spray gun.

  - There are cement-like materials with polymers which cure to form a thick coating. They are generally applied with a trowel.

**How do I decide to use an encapsulant?**

There are several points to consider before using an encapsulant:

- Follow the manufacturer's guidelines for testing, preparation and application. The person performing the on-site testing to determine appropriate surfaces for encapsulants must be acceptable to the manufacturer.

- Encapsulants offer permanent protection from lead-based paint, but must be periodically inspected and repaired, if damaged.

- Different encapsulants must be used in different situations. Follow the manufacturers' recommendations and instructions.

- Encapsulation, or any other measures used to control conditions related to lead poisoning **must have prior approval by the state or local department of health.**

- When covering lead paint, some encapsulants may also destroy architectural detail, especially on moldings.

- Encapsulants must be applied by a person who has met the manufacturers' specifications. Contact the manufacturer for specific criteria.

- The only permanent solutions which do not require periodic maintenance and inspection include replacement of doors and windows, or complete removal of lead paint.

**How do I find out which encapsulants are acceptable for use in New York State?**

- Call your local health department or the State Department of Health's Residential Lead Hazard Control Unit at 1-800-458-1158.

- The Health Department issues an "Acceptable Encapsulant Product List." Consult the list for encapsulant product names. Products on this list meet the safety and performance standards of the American Society for Testing and Materials Standard.

**What surfaces are suitable for encapsulation?**

**The surfaces should be:**

- Dry and free of grime, dirt, dust, grease, charring, smoke residue (especially cigarette or hydrocarbon), mildew, or other contaminants. Water-based encapsulants will tolerate damp, but not wet, surfaces, without losing their most

important properties.

- Free of water leaks
- Non-glossy-high gloss surfaces can be deglossed with chemical deglossers or wet sanding before encapsulation.
- In architecturally sound condition.
- Undamaged (i.e., no holes or large cracks in walls) - Damaged areas must be repaired prior to encapsulation.

**What surfaces are not suitable for encapsulation?**

- "Friction" and high profile (i.e., protruding window sills) surfaces are not suitable, regardless of their condition. Friction surfaces include: window jambs, glides; headers; some stops and parting beads', inside close-fitting door jambs and stops; floors; stair treads; and thresholds. Cabinets with friction surfaces, such as drawers and cabinet doors, should be examined before encapsulation. Where friction exists, planing of the surfaces is recommended.

**What are the advantages of using encapsulants?**

- Residents may not need to leave the building during surface preparation and application if no dust is released. Occupants should never be in the immediate work area (ie.same room) during application.
- If a surface with lead paint is intact, it may be possible to apply an encapsulant without surface preparation.
- Use of encapsulants are generally less costly, more timesaving, and safer than other methods.

**What are the disadvantages of using encapsulants?**

- The use of encapsulants for lead paint control is new. There is limited experience or information on long-term performance.
- Encapsulants cannot be used on surfaces that experience abrasion or constant friction.

- Encapsulants may prematurely wear on a surface that experiences repeated impact, such as door stop, window stop and stair treads.
- Encapsulants may peel off improperly prepared surfaces with old undercoats of paint.
- It is essential to test an encapsulant on-site before applying.
- Encapsulants require periodic inspection for repair or maintenance.
- Water from roof leaks or broken pipes may damage encapsulants.
- Encapsulants must be applied when the air temperature and relative humidity are within specified ranges.

**Are there other methods to control lead paint?**

***YES.*** Lead paint hazards can be controlled in four other ways:

1. Surfaces can be covered with rigid or semi-rigid materials.
2. Doors and windows containing lead paint can be replaced.
3. Paint can be removed utilizing a method that minimizes the release of dust and fumes.
4. A deteriorated surface can be restored.