Conklin Company Inc. TECHNICAL BULLETIN

B-10-34-48

Hail Damage Repairs for Conklin Roof Coatings

Hail Damage

In the event a Conklin Roofing System has suffered various degrees of hail or storm damage, the roofing system is usually repairable and does not require total replacement. The degree of damage must be determined by a thorough on-site inspection of the existing roofing system. Typical damage to the coating is caused by wind driven objects, hail or abrasion of the roofing system. Wind driven objects can penetrate or abrade the coating system leading to potential leaks if not repaired in a reasonable amount of time. Hail can also create major problems in the coating and is normally identified by impact indentations and subsequent circular cracks in the coating at the impact site. Wind driven sand or debris driven across the coating surface can erode the protective coating from the substrate requiring re-coat repairs. The severity of the damage listed above can vary greatly depending on the size, shape and hardness of the objects as well as wind speed. (See table #1)

Substrates

Depending on the substrate and the roofing system, damaged from hail and other wind driven objects can vary and so can the repair process. This document should be used as an outline for repairs to various substrates and roofing systems excluding Spray Polyurethane Foam (SPF) systems. For SPF repairs please refer to SPFA recommendations or Technical Bulletin B-05-06-47

Polyisocyanurate (Polyiso) Insulation Boards

Polyiso is a closed-cell, rigid foam board insulation consisting of a foam core sandwiched between two facers. The facers are composed of various organic and inorganic materials, usually paper and fiberglass. It is widely used in residential and commercial markets for both roof and side wall applications.

Repair Procedures for Polyiso and Fabric Reinforced Roofing Systems

Polyiso products with a paper face are more susceptible to hail damage than products that utilize a fiberglass face, proper identification of the product is necessary for a successful repair.



Paper Faced Polyisocyanurate

Polyiso products with a paper face are more susceptible to hail damage than products that utilize a fiberglass face, proper identification of the product is necessary for a successful repair. Refer to Table 1 for proper repairs.

Fiberglass Faced Polyisocyanurate

Polyiso products with a fiberglass face are less susceptible to hail damage than products that utilize a paper face, proper identification of the product is necessary for a successful repair. The depth of a hail hit can be significantly less than that of a paper faced ISO board and re-coating with base coat, top coat and fabric per specifications is recommended with this product. Refer to Table 1 for proper repairs.

APA Approved Exterior Plywood

The depth of a hail hit can be significantly less with plywood and re-coating with base coat, top coat and fabric per specifications is recommended with this product. Refer to Table 1 for proper repairs.

APA Approved Exterior OSB

The depth of a hail hit can be significantly less with OSB and re-coating with base coat, top coat and fabric per specifications is recommended with this product. Refer to Table 1 for proper repairs.

TECO Approved Exterior Advantech Sheathing

The depth of a hail hit can be significantly less with Advantech and re-coating with base coat, top coat and fabric per specifications is recommended with this product. Refer to Table 1 for proper repairs.

GP Dens Deck Roof Boards

Refer to Table 1 for proper repairs.

<u>Concrete</u>

Re-coating with base coat, top coat and fabric per specifications is recommended with this product. Refer to Table 1 for proper repairs.

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Table 1

Degree of damage	Size & Severity	Extent per 100 ft2	Recommended repair
Light	1/2" or less - less than 1/8" deep	Less than 10 cracks, cuts and/or dents	Caulk and coat cracks, cuts and/or dents. Note: Re-coating should be considered based on the remaining service life of the coating.
		More than 20 cracks, cuts and/or dents	Re-coat per Fabric Reinforced Specifications. Note: Some caulking may be required to seal deeper cracks.
Moderate	1/2" to 3/4" diameter - less than 1/4" deep	Less than 10 cracks, cuts and/or dents	Caulk and coat cracks, cuts and/or dents. Note: Re-coating should be considered based on the remaining service life of the coating.
		More than 20 cracks, cuts and/or dents	Re-coat per Fabric Reinforced Specifications. Note: Some caulking may be required to seal deeper cracks.
Heavy	3/4" to 1- 1/2" diameter - less than 1/4" to 1/2" deep	Less than 10 cracks, cuts and/or dents	Caulk and coat cracks, cuts and/or dents. Note: Re-coating should be considered based on the remaining service life of the coating.
		More than 20 cracks, cuts and/or dents	Replace damaged substrate or add another layer perpendicular to original (if allowed per IBC). Re-coat per specifications.
Severe	1-1/2" or larger diameter - 1/2" or deeper	Less than 10 cracks, cuts and/or dents	Replace damaged substrate or add another layer perpendicular to original (if allowed per IBC). Re-coat per specifications.
		More than 20 cracks, cuts and/or dents	Replace damaged substrate or add another layer perpendicular to original (if allowed per IBC). Re-coat per specifications.

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