TECHNICAL ADVISORY

Adhesive Selection Considerations for Moisture Conditions and Rolling Load Applications

Issue Date: October 2026

APPLICABLE PRODUCTS: North West Rubber sports flooring systems, including SportFloor®, Stamina™, ReAction™, Elite™, and related products.

Purpose

This Technical Advisory provides guidance for selecting an adhesive system based on substrate moisture conditions and anticipated service requirements.

Adhesive selection should be based on project-specific conditions, documented moisture testing results, and the requirements outlined in the applicable Technical Data Sheet (TDS). Installation must comply with all published North West Rubber installation requirements and adhesive manufacturer recommendations.

Moisture Testing Requirements

Prior to installation, concrete substrates should be evaluated using recognized industry standards:

- ASTM F1869: Standard Test Method for Measuring Moisture Vapor Emission Rate (MVER) of Concrete Subfloors Using Anhydrous Calcium Chloride.
- ASTM F2170: Standard Test Method for Determining Relative Humidity (RH) in Concrete Floor Slabs Using In Situ Probes.

Moisture testing should be completed and documented prior to adhesive selection and flooring installation.

Published Moisture Limits

Adhesive System	ASTM F1869 (MVER)	ASTM F2170 (RH)
NWR 1-Part Adhesive	Up to 8 lbs./1,000 sq. ft./24 hours	Up to 90% RH
NWR 2-Part Adhesive	Up to 15 lbs./1,000 sq. ft./24 hours	Up to 95% RH

Maximum allowable substrate moisture conditions vary by adhesive system. Always refer to the current Technical Data Sheet for the adhesive being specified and installed.

Based on current published Technical Data Sheets, the NWR 2-Part Adhesive is approved for higher substrate moisture conditions than the NWR 1-Part Adhesive.

Adhesive Selection Considerations

NWR 1-Part Adhesive

The NWR 1-Part Adhesive is intended for sports flooring installations where substrate conditions and anticipated service demands fall within the published performance parameters of the product.

NWR 2-Part Adhesive

The NWR 2-Part Adhesive provides higher published moisture tolerance and may be considered where:

- Concrete moisture conditions exceed the published limits of the NWR 1-Part Adhesive but remain within the published limits of the NWR 2-Part Adhesive.
- Project conditions require the performance characteristics associated with a two-component adhesive system.
- Project conditions involve heavy traffic, rolling loads, or other service conditions identified within the published performance characteristics of the adhesive system.

Rolling Load Applications

Projects subject to frequent or sustained rolling loads should carefully evaluate adhesive selection based on anticipated service conditions. Examples may include:

- Ice arena service areas
- Maintenance corridors
- Equipment storage rooms
- Facilities utilizing pallet jacks
- Facilities utilizing ride-on maintenance equipment
- Facilities utilizing mobile athletic equipment
- Locations exposed to heavy or repetitive rolling traffic

The NWR 2-Part Adhesive is designed for use in applications where higher bond performance, heavy traffic, and rolling loads are anticipated, subject to the published limitations and installation requirements of the product.

NWR | NORTH WEST RUBBER
INNOVATIVE RUBBER PRODUCTS
33850 Industrial Ave, Abbotsford, BC V2S 7T9
T 604.859.2002 | F 604.859.2009 | TF 1.800.663.8724

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Moisture Mitigation

Where substrate moisture conditions exceed the published limits of the selected adhesive system, an appropriate moisture mitigation strategy should be implemented prior to installation.

Installation should not proceed where substrate conditions exceed the limitations identified in the applicable Technical Data Sheet or where conditions exist that are specifically excluded by the adhesive manufacturer.

Notice

This Technical Advisory is intended as general guidance only and does not replace published Technical Data Sheets, installation instructions, project specifications, professional assessment, or applicable building requirements.

Project-specific conditions may affect product suitability and performance. North West Rubber recommends reviewing the most current product documentation and consulting Technical Services when evaluating unique installation conditions.

Compliance with this Technical Advisory does not, by itself, establish warranty eligibility. Warranty coverage remains subject to North West Rubber's published warranty terms, installation requirements, and applicable Technical Data Sheets in effect at the time of installation.

In the event of any conflict between this Technical Advisory and the applicable product Technical Data Sheet or installation instructions, the Technical Data Sheet and installation instructions shall govern.

Summary

When evaluating adhesive options, substrate moisture conditions, rolling load requirements, and anticipated service demands should all be considered as part of the adhesive selection process.

Where substrate moisture conditions exceed the published limits of the NWR 1-Part Adhesive but remain within the published limits of the NWR 2-Part Adhesive, the NWR 2-Part Adhesive may be considered, subject to project requirements, moisture testing results, and the installation requirements outlined in the applicable Technical Data Sheet.

Projects involving significant rolling loads or demanding service conditions should evaluate the NWR 2-Part Adhesive based on its published performance characteristics and suitability for the intended application.

Review Area	Reviewer	Approval / Comments	Date
Technical / Warranty / Marketing / Legal			

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