

WHAT'S UNDER YOUR ROOF MATTERS: INSULATION AND DECKING



866-ALT-ROOF
WWW.ALTROOFING.COM

HOT TOPIC
OCTOBER 2025 ISSUE



When people think about a roof, they often picture the top layer, like the visible membrane. But with flat roofing systems, especially high-performance solutions like Duro-Last, what's underneath matters just as much as what's on top.

At Alternative Roofing Systems, we specialize in flat commercial and industrial roofing, and we know from experience that a successful roofing system starts from the ground up, literally. The insulation and decking beneath your Duro-Last membrane are critical components that affect not only the performance of your roof but also your building's energy efficiency and long-term maintenance costs.

WHY INSULATION & DECKING ARE CRITICAL IN FLAT ROOFING

In any flat roofing system, the insulation and decking form the foundation that supports the membrane and affects how the roof handles moisture, temperature, and load. A high-performance membrane like Duro-Last needs a stable, well-prepared base to deliver on its promise of longevity, watertight protection, and energy efficiency.

Ignoring or compromising on these layers can lead to:

- Energy loss through thermal bridging
- Premature roof failure
- Increased long-term repair costs

MEETING WASHINGTON STATE ENERGY CODE REQUIREMENTS (WSEC-R2021)

In addition to performance considerations, commercial and low-slope roofs in Washington State must comply with the **Washington State Energy Code (WSEC) – R2021**. Under this code, most commercial and multifamily buildings require a minimum of R-38 continuous roof insulation for new construction and major reroofing projects.

This means your flat roofing system needs to be designed with adequate insulation thickness and material selection to meet or exceed R-38, which helps:

- Lower heating and cooling costs
- Improve occupant comfort
- Support sustainable building practices
- Ensure code compliance and avoid costly rework

At Alternative Roofing Systems, we stay current on code changes and ensure every Duro-Last roof we install is designed to meet or exceed WSEC standards. We help you select insulation options, such as Polyiso or tapered systems, that maximize performance while maintaining compliance.

INSULATION:

Insulation plays a critical role in the performance and efficiency of any flat roof system. For Duro-Last installations, it ensures a smooth surface, improves thermal resistance, and supports code compliance.

In Washington State, the WSEC-R2021 requires most commercial and multifamily flat roofs to meet R-38 insulation standards. This means selecting the right insulation, and enough of it, is non-negotiable.

Common options include:

- Polyiso: High R-value per inch and widely used with Duro-Last systems.
- EPS: Budget-friendly, with lower R-value than Polyiso.
- Tapered systems: Improve drainage while helping meet R-38 without excessive material buildup.

At Alternative Roofing Systems, we'll guide you to the best insulation strategy for both performance and code compliance.

DECKING:

Your roof is only as strong as the surface it's built on. Roof decking provides the structural base for insulation and membrane attachment.

We work with all standard decking types, including:

- Steel deck (common in commercial buildings)
- Wood (plywood/OSB)
- Concrete

Before installation, we evaluate your existing deck to ensure it's structurally sound and suitable for Duro-Last attachment. If repairs or replacement are needed, we'll handle that too – so your new roof has the support it needs for long-term performance.



WHAT'S UNDER YOUR ROOF MATTERS: INSULATION AND DECKING



866-ALT-ROOF
WWW.ALTROOFING.COM

HOT TOPIC
OCTOBER 2025 ISSUE