

RapidLock (RL[™]) Frequently Asked Questions





Q: What is RapidLock (RL) technology?

A: RapidLock is a revolutionary commercial roofing membrane attachment system that provides a fully adhered membrane without the use of adhesives.

Q: How does the RapidLock system work?

A: A hook and loop mechanical bond is achieved through the optimization of the FleeceBACK[®] membrane to act as the "loop" and the use of a specialized insulation facer to act as the "hook."

Q: Can I use standard FleeceBACK membranes in a RapidLock system, or Flexible FAST[™] Adhesive with FleeceBACK RL membranes?

A: No, FleeceBACK RL membranes are specially designed for use in a hook and loop system and use a different fleece than standard FleeceBACK membranes. RL fleece is not compatible with Flexible FAST two-part urethane adhesive. In addition, a release liner is applied to the RapidLock fleece that allows the applicator to position the sheet before engaging the hook and loop.

Q: Is this a VELCRO® roof?

A: VELCRO is the leading brand name of hook and loop fastening systems. So technically, it's NOT a VELCRO roof, but Carlisle is partnering exclusively with VELCRO Brand Securable Solutions on this technology.

Q: What are the advantages of a RapidLock roof system?

A: Since no adhesives are used for membrane attachment, the roof can be installed in any temperature with no odors. This makes RapidLock systems ideal for occupied buildings like hospitals, schools, and offices. Additionally, there are no overspray concerns and very little cleanup at the end of the job (no pails, drums, canisters, or rollers).

Q: Where does the RapidLock system fit alongside other single-ply solutions – where is the product positioned?

A: Traditional single-ply membranes installed with bonding adhesives are very popular fully adhered systems, with self-adhered technologies (SAT) or "peel and stick" membranes gaining interest as well. FleeceBACK membrane systems have become incredibly popular due to their system performance and overall robustness. FleeceBACK membranes are adhered with two-part urethane adhesives that can be dispensed in a variety of ways – from a \$40,000 piece of equipment that allows the use of 50-gallon drums to a self-contained "tank" system requiring no equipment at all. The RapidLock system is a premium fully adhered FleeceBACK membrane system that requires no adhesive, and therefore no equipment, while offering the performance enhancements of a FleeceBACK system.

Q: What training is required to install RapidLock systems?

A: All Carlisle applicators attend training prior to being approved. The RapidLock system is one of the hands-on installations they practice during training. With that said, the RapidLock system is extremely simple to install. The release liner on the back of the FleeceBACK membrane is slit down the middle and allows applicators to position the sheet prior to attaching it to the insulation. Additionally, the system is "repeatably consistent." In other words, no matter what the crew's experience level is, they will get predictable results every time.





Q: Are there any installation advantages to the RapidLock system?

A: There are major labor savings advantages with RapidLock. In time trials conducted thus far, crews unfamiliar with the RapidLock system experienced up to an 80% reduction in rooftop labor when compared to traditional bonding adhesives, and up to 25% labor savings when compared to low-rise urethane adhesives. Additionally, several contractors report that they installed RapidLock jobs with half the number of installers on the roof – from 10 to five and from eight to four!

Q: Are there installation differences with the RapidLock system?

A: Other than not needing an adhesive to attach the membrane, not really. RapidLock insulation boards can be fastened with standard plates, or you can adhere the boards to the deck and/or subsequent insulation layers to limit thermal bridging. The installation of RapidLock membranes is similar to that of traditional FleeceBACK membranes; after attaching the membrane to the insulation, the membrane is broomed (to smooth and fully engage) and rolled (to embed hooks and loops).

Q: What are the cold weather restrictions for RapidLock systems?

A: The RapidLock system is tested down to -45°F (-43°C) and the hooks and loops are unaffected at this temperature. No adhesives are required to attach the membrane, so there are no concerns about cold weather. RapidLock allows you to roof year-round, although you may need to remove the snow from the roof first.

Q: How does the RapidLock system's performance compare to that of traditional bonded membrane roof systems?

A: RapidLock achieved a Factory Mutual 1-90 approval rating for the system, with pressures up to 225psf in the corners. Carlisle offers up to a 20-year, 90-mph peak gust wind speed warranty. Additionally, and as with all FleeceBACK membrane systems, the RapidLock system provides excellent puncture and hail performance.

Q: What product options are available for the RapidLock system?

A: Several membrane and insulation options are available for RapidLock systems. RapidLock membrane types include EPDM, TPO, and PVC. RapidLock insulation options include standard insulation in both facer types and various thicknesses, as well as cover boards.

Q: At the end of the roof membrane's lifecycle, can I peel it off and replace it with another RapidLock membrane?

A: The RapidLock system was designed for maximum performance; the membrane creates a tenacious bond with the insulation. For this reason, new membranes cannot be attached to existing RapidLock insulation on re-roofing jobs.