

3M™ Fastening Solutions -

Hook and Loop vs. 3M™ Dual Lock™ Reclosable Fasteners

3M™ Reclosable Fasteners are great alternatives for traditional mechanical fasteners and include both 3M™ Hook and Loop Fasteners and 3M™ Dual Lock™ Fasteners. A part's aesthetics and removability can be dramatically improved with their use. Potential applications include wall and ceiling panels and assembly solutions for electronic components and cabinetry. In addition, many graphics and signs can be displayed and changed within an instant using 3M™ Fastening Solutions. There are many unique benefits to fasteners within the product line so understanding the main differences and similarities between the two types will help determine the best solution for your application.

As quickly as they are attached, they can just as easily be pulled apart by hand to disengage the bond. 3M™ Hook and Loop Technology has often been compared to VELCRO® Brand Fasteners. 3M™ Hook and Loop Fasteners are available in a variety of colors and can have specialized properties like flame resistance. They are available with or without adhesive backings which can bond to a variety of surfaces including low-surfaces such as polyethylene and polypropylene.



Several options to consider include:

- 3M™ Hook Fastener SJ3530 paired with 3M™ Loop Fastener SJ3531
- 3M™ Hook Fastener SJ3526 paired with 3M™ Loop Fastener SJ3527
- 3M™ Hook Fastener SJ3571 paired with 3M™ Loop Fastener SJ3572

3M™ Dual Lock™ Reclosable Fasteners are polyolefin stems with mushroom shaped tops. These stems lock into one another providing a hidden attachment closure. Three different stem densities (number of stems per square inch), are available. The higher stem count, the greater the strength of the material. Stem densities include: 170, 250, and 400. A variety of mating combinations exist for 3M™ Dual Lock™ Reclosable Fasteners. The following combinations are often used:

- Type 170 to Type 250
- Type 170 to Type 400
- Type 250 to Type 250
- Type 250 to Type 400

Note that mating Type 170 to 170 typically provides too weak a bond while Type 400 to Type 400 is generally too strong.

3M™ Fastening Solutions - Hook and Loop vs. Dual Lock™ - continued

3M™ Dual Lock™ Reclosable Fasteners options include:

- 3M™ Dual Lock™ Reclosable Fastener SJ3560 (250 stems), SJ3561 (400 stems), and SJ3562 (170 stems) (Clear Dual Lock™ with 3M™ VHB™ Tape adhesive)
- 3M™ Dual Lock™ Reclosable Fastener SJ3550 (250 stems), SJ3551 (400 stems), and SJ3552 (170 stems) (Dual Lock™ with 3M™ VHB™ Tape Adhesive)

So when should you choose 3M™ Dual Lock™ Reclosable Fasteners vs. 3M™ Hook and Loop? 3M™ Dual Lock™ Reclosable Fasteners have five times the tensile strength of hook and loop. Tensile strength refers to a material's resistance to breaking under tension and is typically measured by the maximum stress that a material can withstand while being stretched or pulled before breaking. In addition, 3M™ Dual Lock™ Reclosable Fasteners also make an audible snap sound when stems are properly positioned making it easy to discern correct placement. 3M™ Dual Lock™ Reclosable Fasteners are easily repositionable and can provide vibration damping for some applications. Because they are made from polyolefin, they also perform well in high humidity applications and can be disinfected. The stems in Dual Lock™ also tend to pick up less particle contamination than their hook and loop counterparts.

3M™ Hook and Loop Reclosable Fasteners have their own set of benefits. One of the major advantages of 3M™ Hook and Loop technology is the product's long service life. Some 3M™ Hook and Loop products can withstand 5,000+ closures. Dual Lock™ tends to lose performance characteristics after 1,000+ closures. Due to the nature of materials involved, 3M™ Hook and Loop materials tend to be more economical than 3M™ Dual Lock™ Reclosable Fasteners.

Regardless of which 3M™ Reclosable Fastener you choose, you are certain to improve the design and functionality in your application. Without the need to use unsightly screws, rivets and bolts, you can achieve a smooth clean, more aesthetically pleasing appearance. Finally, you'll be able to save installation time eliminating tooling requirements.