



# Military Grade Parachute Cord vs. 550 Paracord

Parachute cord was originally developed to act as suspension lines for parachutes used by airborne military units. It is a lightweight kernmantle style braided cord manufactured from nylon in accordance with military standard MIL-C-5040. Over time military personnel found this cord to be useful for many other tasks such as securing equipment, tag lines, general tying and even clothes lines.

Following WWII, parachute cord was found in many surplus outlets, resulting in growing demand for the product within civilian populations. Today it remains one of the most popular and versatile general purpose cords on the market. In additional to utilitarian functions, it is also widely used for decorative and braiding applications including bracelets, key chains, lanyards, and belts. As its use spread outside the military, it also started being referred to as 550 cord and Paracord. At the same time, lower spec, less expensive versions of this cord were developed and now permeate the market.

Despite the prevalence and popularity of the cord today, there remains confusion surrounding the difference between Military Grade Parachute Cord, and 550 Paracord. True Military Grade parachute cord is manufactured to the standard MIL-C-5040. There are varying types of cord that fall within that standard ranging in diameter, colour, spool length and core configuration. The Type III cord has a 3mm diameter with a 7 strand core, and is by far the most common variant of the MIL-C-5040 Standard. Commercial or utility grade 550 paracord can look and feel identical to the MIL-C-5040 cord. However, there are some key differences:

- MIL-C-5040 requires that the cord be manufactured from nylon which has gone through a pre-treatment process prior to being manufactured into cord. The yarn used must be wet shrunk at specific temperatures, and for specific time frames which differ for the core and skin yarns. They must then go through a specific drying process prior to using. Commercial grade versions of this product would typically be manufactured from high tenacity nylon or polyester which is readily available to manufacturers at a fraction of the cost.
- MIL-C-5040 requires that a very fine yarn be plied up and wound onto each of the 32 braider carriers used to manufacture the product. Alternatively, when manufacturing commercial or utility grade 550 paracord, it would not be uncommon to use a larger feeder yarn on each of the 32 braider carriers.
- MIL-C-5040 mandates that the cord lose not more than 15% of its original breaking strength after exposure to light and heat, when tested in accordance with the standard.
- Cord manufactured to MIL-C-5040 must be manufactured from yarn produced within the previous two years.
- The yarn pre-manufacturing process combined with the other rigorous manufacturing requirements represents a significant input cost to producers, which in turn results

in the finished cord being much more expensive than the commercial and utility grade versions. For critical applications, this extra cost is well worth it. However, for decorative and other non-critical applications, a commercial grade Paracord is more than sufficient. As always, Cancord strives to have the ideal product available for every application. We always have both classes of cord available from stock.



# Vertical Lifelines & Fall Arrestors for the Swing Stage, Suspended Access and Scaffold Industry in Canada

The past several months have brought a number of changes and challenges to the Swing Stage, Suspended Access and Scaffold Industry in Canada. New legislation was implemented in July, 2016 which mandates the use of vertical lifelines and fall arrestors that are certified to CSA Z259.2.5.

While this change ultimately improves the overall safety of this industry, there remains some confusion as to what it means for companies and individuals.

Some key factors to keep in mind if you are involved with this industry include:

- Vertical lifelines must be certified to CSA Z259.2.5, and must be labeled as such. The label must include the date of manufacture. Make sure the label has the CSA mark on it so you know it was actually certified by CSA.
- Vertical lifelines must have a CSA Certified connector installed by the manufacturer. This connector could take the form of a ladder hook, rebar hook, snap hook or carabiner, provided it is CSA Certified to CSA Z259.12 standard. The most common hardware attachment for the Scaffold Industry is a ladder hook.
- Fall Arrestors, often referred to as Rope Grabs, must be certified to CSA Z259.2.5

Cancord manufactures a full line of vertical lifelines that meet the requirements of this industry and are certified for use with compatible CSA Certified fall arrestors. We encourage you to contact us for referral to a distributor in your area.





## How to Identify Quality in Braided Rope

At Cancord, our primary focus is quality rope. Our team works continuously to improve both our products and our processes such that our customers know when they purchase from Cancord they are always getting the best possible rope at the best possible price.

A quality braided rope will have a smooth, uniform appearance when new. When purchasing a new piece of rope, look down the length of the rope for possible quality concerns, including but not limited to:

**Broken Yarn Filaments** which typically indicate the use of improperly maintained machinery. The result is lower overall rope strength and premature wear.

**Looped or Pulled Strands** which are the result of poor quality braiding, yielding a rope in which all of the yarn strands are not working together equally. This will result in lower strength and premature wear. Looped strands may also snag on anything in the surrounding environment, causing further unnecessary wear and damage to the rope.

**Uneven Yarn Color or Sheen** which often indicates the manufacturer has used inferior yarn or clearing lots of yarn. Many manufacturers do this to reduce costs. However, it can result in a variety of problems including reduced or inconsistent strength and premature wear.

**Inconsistent Diameter** which occurs as a result of poor braiding. It may indicate problems with the core of the rope, or the balance of the skin and the core. It will result in lower breaking strength and difficulties if the rope is run through any hardware. **Dirt** on new rope, often in the form of grease or oils spots, is an indication that the manufacturer is not committed to quality and inspection.

Cancord ropes are manufactured using only premium quality yarns. We have an ISO 9001 quality control system, with many checks and balances in place to ensure you are getting only the highest quality product.





Image Source: US Marine Corps

## History of Rope in the Military

In addition to its many practical uses, rope has a long history of decorative and ornamental uses across different branches of the military in various countries. There is a rich tradition of using different types of rope and lanyards as a means of awarding commendations to soldiers and identifying members of various units.

The fourragère was introduced by the French Ministry of War in WWI as a means of recognizing units, organizations, and soldiers who had distinguished themselves in service. It is a braided and knotted cord with a spike attached, which is worn as part of an officer's uniform. The design of any given fourragère becomes more complex as the number of commendations received by the unit or soldier increases.

Within French military history, the most common fourragère contained green and red, the colours of the Croix de Guerre, or Cross of War. The Croix de Guerre was a medal that was often bestowed upon members of allied countries, and the same was true for the fourragère, meaning that you didn't specifically need to be a member of the French military to receive one. The second tier fourragère was representative of the Medaille Militare, coloured yellow and red, with the third and final tier being scarlet in colour and representing the Legion d'Honneur.

The fourragère is meant to embody and recall the courage and fighting spirit of members of the units who have gone before. It is representative of membership to a unit, and therefore, members typically relinquish their fourragère when they leave the unit. While France was the first country to offer the modern fourragère, several other countries also award the fourragère or a variation thereof, including Belgium, Portugal, Luxembourg, and South Korea. While the fourragère has a rich history, it is far from the only example of where the military used rope products as decoration to declare a sense of belonging. Within Canada, many corps, units and regiments used coloured lanyards to distinguish themselves from others during not only the first and second World Wars, but also the interwar years. For example, members of the Royal Canadian Army Medical Corps wore a dull cherry lanyard, while the Saskatoon Light Infantry wore green lanyards. Lanyards were typically worn on the right shoulder of the service dress uniform, though in World War II, permission was given to units to also add lanyards to the battle dress uniform.

The use of rope and cord for such adornments ensures that they will stand the test of time, allow for current squadron members to proudly wear them, and one day potentially wind up in a museum, where everyone will be able to view them and remember the heroic sacrifices of the armed forces, who put their lives on the line in pursuit of a better future.



## Featured Product: Parachute Cord

Military grade parachute cord manufactured to the MIL-C-5040 specification is a stock item for Cancord. We carry Type 1A, Type II, and Type III in different colours and spool lengths.

#### View Product Page



## **Custom Solutions**

At Cancord Inc, we take great pride in our ability to work with our customers to provide them with the optimal product for their application. While we stock a broad assortment of products manufactured to different government and military specifications, we also have the capability to manufacture many other products on a made to order basis. We have an extensive NSN database which often enables us to determine what product you are searching for with very little information. We encourage you to contact us with your requirements.

#### **Read More**





### Ask Now

Cancord is committed to ensuring you have all the information you need to purchase the correct cordage product for your needs. If you are unable to find the product you are looking for, or if you are ready to place an order, please contact Inside Sales and Major Accounts Manager Wendy Johnstone.

#### **Contact Wendy Johnstone**



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