Wet Suits & Dry Suits

Wet suits and dry suits are very important when it comes to scuba diving. Your normal body temperature hovers around 98.6°F (37°C). If you are scuba diving in water that is cooler than your body temperature your temperature will drop. In all water, even the warmest, tropical waters, you will need thermal protection, like a wet suit, dry suit or dive skin, to keep warm and to keep safe while scuba diving. The cold affects our ability to think and our physical response time slows, which can lead to an accident. Warm tropical water will begin to feel cold after prolonged scuba diving, so it is always a good idea to wear light insulation at a minimum.

When choosing thermal protection, like a wet suit or dry suit, you need to consider the following factors:

- Water temperature
- Your activity level during a dive
- Your body size

You should always wear more insulation in colder water and lighter insulation in warmer water. Your level of activity can be a good indicator of how much insulation you should wear during a scuba dive. The more active you are during a dive the more heat your body generates and the warmer you remain throughout your dive. Larger scuba divers may need less insulation than smaller scuba divers and small, muscular scuba divers may need less insulation than larger scuba divers. It is important for you to try different amounts of insulation in differing water temperatures to determine what you need.

Some scuba divers need more insulation than others, regardless of activity or size. Some scuba divers can dive in tropical water wearing only a lycra body suit, commonly known as a dive skin, while others need a 2mm wet suit. Some scuba divers can dive in cold water wearing only a 6mm wet suit, while others need the protection of a dry suit. If you are scuba diving in water below 55°F (12.7°C), a dry suit is the warmest type of thermal insulation available.

Dive skins, wet suits and dry suits also protect your skin from cuts, scrapes, abrasions and stings which can occur while you are scuba diving. A simple brush against specific forms of coral and fish can cause painful irritations and burns on bare skin, but may not be noticeable or even occur, if your skin is protected.
**Wet Suits**

Wet suits are the most popular form of thermal protection for scuba divers. They are easy to use and inexpensive. Wet suits are made from neoprene; synthetic rubber foam that is filled with thousands of tiny gas bubbles. Neoprene wet suits are available in a variety of thicknesses from 2mm-9mm. The thicker the neoprene the warmer the wet suit, although wet suits made from 5mm and 6mm neoprene are very bulky and sometimes uncomfortable to wear.

A wet suit must fit your body snugly for it to offer the best protection. Once you enter the water a thin layer of water enters your wet suit filling the space between your skin and the inner surface of the wet suit. This layer of water is then warmed to your body temperature and it helps to keep you warm throughout your dive. Some people prefer to have their wet suit custom-made for a perfect fit. If you have a wet suit custom-made you can specify the minute details regarding shape, color and extra detailing that may not be available in most off-the-rack wet suits.

Wet suits are available in many styles and colors. Some of the most popular styles of wet suit include:

- The Full-Body Wet suit - a full one-piece wet suit which covers your entire body. These are the most commonly found wet suits as they are used in all water temperatures, in varying [Wet suit thicknesses](#).
- The Shorty Wet suit - a one piece wet suit with short sleeves and legs which end mid-thigh. These are a preferred a wet suit for scuba diving in warmer waters.
- The Farmer John Wet suit - a two piece wet suit, including bib-style overalls and jacket with an attached hood. These are a preferred wet suit for cold water diving, since the layering offers added protection.

There are a variety of wet suit accessories available as well, including: separate hoods, gloves, vests, jackets, step in jackets and booties, which can usually be found at any [scuba gear](#) retailer. These accessories can offer added warmth and protection to a basic wet suit and give you versatility to adjust the level of protection you need based on the location of your dive. Not all scuba diving locations will let you use all accessories! For example, in Cozumel, Mexico you are not allowed to wear scuba gloves while scuba diving to prevent divers from the temptation of touching any plant life or animal while in the water. Always check with your dive shop about which accessories you may use while scuba diving.
Maintaining your wet suit

The key to keeping your wet suit clean and odor-free is proper maintenance after each dive. These maintenance procedures will help to keep your wet suit in good shape for many years of scuba diving:

1. Rinse your wet suit, inside and out, in clean, freshwater after each dive and allow it to dry thoroughly before storing. After a dive your wet suit will be covered in a salty residue and/or dirt; this must be rinsed clean to prevent the neoprene from degrading. Your wet suit must be completely dry before storing to ensure the neoprene stays clean, odor-free and free of mildew or mold.
2. Wet suit zippers should be lubricated occasionally to prevent degradation of the metal or plastic.
3. Always store your wet suit out of direct sunlight. Direct sunlight will break down the neoprene after years of exposure.
4. Periodically machine or hand-wash your wet suit. A good rinse after each dive helps to keep your wet suit clean, but to ensure there is no residue or grit left on your wet suit you must properly clean it on a regular basis. You can purchase a commercially prepared neoprene shampoo, zipper lubricant/desalter and neoprene sealant to thoroughly clean and seal your wet suit. A commercial shampoo and sealant are specifically manufactured to care for your neoprene and is the recommended method for proper maintenance.
5. Always store your wet suit on a wide hanger to prevent the neoprene from cracking or becoming misshapen.
6. Any holes in your wet suit can be fixed using commercial wet suit cement.

Wet Suit Thickness

In colder water, wear a thicker wet suit to prevent chill and hypothermia. The chart below gives average recommendations for wet suit thickness for water temperatures. The ranges overlap depending on individual body heat and comfort; some divers may be more comfortable in a lighter suit, while others may appreciate a thicker neoprene.

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Suit Thickness*</th>
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<tbody>
<tr>
<td>76°F - 86°F</td>
<td>1/16&quot; (1.6mm) neoprene or lycra</td>
</tr>
<tr>
<td>69°F - 84°F</td>
<td>1/8&quot; (3mm) neoprene</td>
</tr>
<tr>
<td>64°F - 77°F</td>
<td>3/16&quot; (5mm) neoprene</td>
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<tr>
<td>Temperature Range</td>
<td>Recommendation</td>
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<tr>
<td>49°F - 75°F</td>
<td>1/4&quot; (6.5mm) neoprene</td>
</tr>
<tr>
<td>33°F - 66°F</td>
<td>3/8&quot; (9.5mm) neoprene, drysuit</td>
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* based on average manufacturer recommendations