CMC RESCUE, INC. PO BOX 6870 SANTA BARBARA, CA 93160

(800) 235-5741 / (805) 562-9120 WWW.CMCRESCUE.COM

TECHNICAL REPORTS











USE OF THE FIGURE 8 DESCENDER AS A COLLECTION POINT

CMC Rescue has received several calls from customers asking us to help them resolve the question of whether or not it is an acceptable practice to use a figure 8 descender as a collection point. For many years the figure 8 descender has been used as a collection point for rigging anchors, high lines and litters. The large symmetrical hole made it the best choice of the equipment available. This practice is losing favor for three reasons:

- The product is being used in a manner not intended by the manufacturer.
- The product has not been tested in the collection point configuration.
- More suitable products now exist: O-rings and anchor plates.

The use of a product in a manner not intended by the manufacturer can transfer the liability for any damage that occurs as a result of the use to the user. The question is complicated in the rescue field because rescuers are frequently required to adapt equipment and procedures to meet the needs of the incident. For liability reasons, a department should use the proper equipment for the purpose unless there is a compelling reason to do otherwise, for example, weight reduction in a back-country gear pack.

Figure 8 descenders vary in regard to their material, shape and the manufacturing process. The smaller, drop-forged aluminum 8s intended for rock climbers may lack the strength needed for a system collection point. This would be of particular concern if large steel carabiners were used to connect into the aluminum descender. The figure 8s machined out of aluminum plate and the steel models are probably safe to use in most applications.

The ears on the figure 8s designed for rescue have the potential for creating a problem when carabiners are clipped into the large hole. In normal operation, a rigging system can be loaded and unloaded several times. When the system loads, there is a chance that a carabiner gate could hang up on an ear. If the gate is not locked, a possibility exists that the carabiner will disconnect.

Steel O-rings are a good choice for a collection point because of their high strength and symmetrical shape. It is also less expensive to dedicate an O-ring as the collection point rather than a figure 8 descender.

We designed the CMC Rescue Anchor Plate to be a more efficient collection point when rigging anchor systems. Our experience in CMC Rescue School classes indicated that anchor plates made it quicker to set up systems and we saw fewer mistakes. The large hole acts as the collection point. The small holes make it easy to attach and remove the carabiners holding descenders, pulleys and rope grabs. Today there are a variety of anchor and rigging plates on the market. Depending on their rated strength, most should work well as a collection point for high lines, anchors and litters. The pattern of holes makes them much more efficient than a figure 8 descender.

©2012 CMC Rescue, Inc. All rights reserved.