**NOTE:** All personnel working near an edge must take fall protection precautions as required by the AHJ. Edge personnel must place the edge protection, secure it, and continue to evaluate its effectiveness for the duration of the operation. If necessary, the edge protection is re-positioned or more is added. Edge protection placement for rope and webbing is not limited to just the edge location; it may need to be placed several feet down or back from the edge or used to provide protection for anchor ropes or webbing.

- **Step 1:** Determine the need for the placement of edge protection.
- Step 2: Determine what type of edge protection will be utilized.
  - Edge rollers (all metal)



- Edge pads (canvas tarps)
- Edge guards (sleeves)

**NOTE:** Depending on equipment available and the location of rescue operations, a combination of all three types may be used.

Step 3: Place edge protection under or over ropes and webbing to be protected.



- **Step 4:** Ensure the edge protection is secured in place using rope cordage or webbing.
- **Step 5:** Continue to evaluate the effectiveness of the edge protection for the duration of the operation.
- **Step 6:** Assist team members in moving the load safely over and back from the edge.

### 6 SKILL SHEETS

**Step 1:** Locate a suitable anchor based on the location of the victim and the anticipated rescue operation.

**NOTE:** Working from the edge back to the anchor, identify the fall line for the load or belay lines. A change-of-direction (COD) anchor system can be constructed to re-direct the load or belay lines to the desired location.



Step 2: Pad the anchor with edge protection if necessary.Step 3: Select the appropriate length anchor strap.



- Step 4: Wrap the strap around the anchor object.
- **Step 5:** Attach a carabiner to the strap and determine that the carabiner will not be tri-loaded. If necessary, use a rigging plate or an additional carabiner to avoid tri-loading.

**CAUTION:** Ensure that the inside angle (critical angle) of the webbing or anchor strap is 90 degrees or less when the sling is pulled tight at the center. Use a longer anchor strap or piece of webbing if necessary.

**Step 6:** Attach the load or belay line to the single-point anchor system.

**CAUTION:** A single bombproof anchor may be used for both the load and belay but each should utilize its own anchor system rigging. Never attach both load and belay lines to the same anchor system.

Step 7: Second rescuer conducts an independent system safety check.

**Step 1:** Locate a suitable anchor based on the location of the victim and the anticipated rescue operation.

**NOTE:** Working from the edge back to the anchor, identify the fall line for the load or belay lines. A change-of-direction (COD) anchor system can be constructed to re-direct the load or belay lines to the desired location.



Step 2: Pad the anchor with edge protection if necessary.Step 3: Select the appropriate length of webbing.



Step 4: Wrap the webbing around the anchor object three times.Step 5: Secure the two ends of the webbing using a water knot.



**Step 6:** Pull two bights of the webbing tight, forming a sling. **NOTE:** The water knot should be tight on the anchor object and be located in the middle of the sling created by pulling on the two bights of webbing.



**Step 7:** Attach a carabiner to the two bights of webbing.

**CAUTION:** Ensure that the inside angle (critical angle) of the webbing or anchor strap is 90 degrees or less when the sling is pulled tight at the center. Use a longer anchor strap or piece of webbing if necessary.

**Step 8:** Attach the load or belay line to the single-point anchor system.

**CAUTION:** A single bombproof anchor may be used for both the load and belay but each should utilize its own anchor system rigging. Never attach both load and belay lines to the same anchor system.

**Step 9:** Second rescuer conducts an independent system safety check.

- Step 1: Select two anchors.
- **Step 2:** Construct the anchor points by using anchor straps or webbing (by using the wrap three/pull two method).



**Step 3:** Form a large loop with a long piece of webbing.

**Step 4:** Put one twist in the loop and connect each end to one of the anchor points.



**Step 5:** Grab the middle of the large webbing loop (where the twist makes an "X") and attach a carabiner.



**NOTE:** The webbing loop knot should be near the middle of one of the legs and not near any of the carabiners.

- **Step 6:** Pull the carabiner toward the fall-line and verify that the angle formed between the legs of the loop is less than 90 degrees.
- **NOTE:** The load or belay system attaches to this carabiner.



**Step 7:** Second rescuer conducts an independent safety check on the rigging.

- Step 1: Select three anchors.
- **Step 2:** Construct the three-anchor points by using anchor straps or webbing (by using the wrap three/pull two method).



Step 3: Form a large loop with a long piece of webbing.



**Step 4:** Connect the loop to each of the three anchor points.



**Step 5:** Grab the webbing loop with both hands, one on either side of the middle anchor point, and pull toward the bottom half of the loop (forming three long bights).

**Step 6:** With the webbing in each hand, give the webbing a twist, creating two small loops.



**Step 7:** Grab the bottom strand of the large loop and one of the small loops with a carabiner.



**Step 8:** Repeat for the second small loop with another carabiner.



**Step 9:** Pull the two carabiners toward the fall-line and verify that the angle formed between the outside legs is less than 90 degrees.

**NOTE:** The load or belay system attaches to this carabiner.

Step 10: Second rescuer conducts an independent safety check on the rigging.