



ROPE ACCESS EQUIPMENT & PRINCIPLES



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THE following paragraphs cover some of the basic equipment and principles necessary to perform rope access. It is important that users of rope access equipment read and refer to manufacturer instructions because every device has unique characteristics that are not covered here.

Full Body Harness: The harness required for descent control applications should be an ANSI Z359.1-2007-approved, full body, fall arrest harness that has been designed with rope access in mind. The harness needs to have a front D-ring located low on the worker's body to simulate a sitting position. The harness also needs to have a dorsal D-ring for the secondary system. Ideally, the D-ring for the descent control is located at waist level. Harnesses with D-rings on the upper chest area are not conducive to descent control work because the worker tends to be choked and has difficulty operating the unit in front of his/her face.

Sit harnesses alone should not be used in the workplace. Sit harnesses are popular for emergency services and mountaineers but the user can be easily inverted and hang upside down or even fall-out of the harness if it is not used properly. Although lighter and generally more accepted for rope access, sit harnesses should not be used in the workplace.

Hard Hat: A hard hat with a chin strap should be used for descent control. When walking down a vertical surface or navigating around a structure, keeping one's balance is difficult, and it is com-

mon to frequently slide into the structure whenever balance is lost. A hard hat will protect the head if a fall occurs. It is also very common for co-workers to be above or below the person who is "on-rope" in the area called the "target zone" or "landing zone" where tools and small items (nuts, bolts, etc.) frequently fall to the ground. A good quality hard hat should be worn for protection from these falling items.

Leather Gloves: Users hold the brake line with their brake hand. The descent rope travels through the brake hand and generates heat. Users should be familiar enough with the device, know how their weight will affect their descent and be comfortable with their ability to descend under control at all times. It is very important that good quality gloves are used to absorb some of the heat generated while descending.

