

## Separate Back-Up /Independent Lifeline Requirements

### Description

This bulletin is intended to clarify the requirements for backup / independent lifeline fall protection systems for personnel in various work applications.

### Suspended Work

When personnel are suspended from a winch line or similar device and performing work activities, OSHA requires a personal fall protection system (example: separate/independent lifeline) be used to protect the suspended worker in case the primary line fails. Suspension work is typically referred to as suspended scaffold work, rope descent work, suspended harness work or boatswains' chair work. Suspension work is considered non-emergency work.

Reference the following regulations:

- OSHA 1910.27  
1910.27(b)(2) Use of rope descent systems. The employer must ensure: 1910.27(b)(2)(vi) Each employee uses a separate, independent personal fall arrest system that meets the requirements of subpart I of this part;
- OSHA 1910.28  
1910.28(b)(12) Scaffolds and rope descent systems. The employer must ensure: 1910.28(b)(12)(i) Each employee on a scaffold is protected from falling in accordance 29 CFR part 1926, subpart L; and 1910.28(b)(12)(ii) Each employee using a rope descent system 4 feet (1.2 m) or more above a lower level is protected from falling by a personal fall arrest system.
- OSHA 1926.451  
1926.451(g)(1)(i) Each employee on a boatswains' chair, catenary scaffold, float scaffold, needle beam scaffold, or ladder jack scaffold shall be protected by a personal fall arrest system; 1926.451(g)(1)(ii) Each employee on a single-point or two-point adjustable suspension scaffold shall be protected by both a personal fall arrest system and guardrail system;

### Raising/Lowering

If the person attached to the winch line or similar device is being raised / lowered (being “transported”), a separate / independent lifeline fall arrest system is not required by OSHA as long as the person is securely attached to the raising / lowering system. Attachment to a fall protection and / or rescue retrieval system may be required once the person reaches the working level and is no longer being transported. If the raising / lowering operation ceases and the personnel perform work activities while suspended from the winch line or similar device, a backup / independent lifeline (fall protection systems) is required. When a person is attached to a winch line and climbing a ladder for entry / exit to a vertical space, a separate / independent fall arrest system is not required. The climber’s hands and feet on the ladder are considered the primary means of protection and the taut winch line is the secondary protection.

NFPA standards require a redundant/ back up protective system be utilized when lowering or raising personnel in vertical spaces:

NFPA 350, Guide for Safe Confined Space Entry and Work

10.1.2.2.2 Retrieval Systems for Entry and Fall Protection. Equipment utilized to create retrieval systems sometimes serves other purposes. In the case of vertically configured spaces where no other means of self-assisted entry exists (e.g., ladders or stairs), retrieval systems having the capability of both lowering and raising personnel can be used as the principal means of entering and exiting the space. Entry Supervisors should ensure that an approved and appropriate redundantly anchored and operated backup system is utilized during

nonemergency use of retrieval equipment in the event of failure of the primary system. For instance, a tripod and winch, used to lower Entrants into a space in a purely vertical environment, should also have a backup protective system such as fall protection blocks, self-retracting lifelines, or belay systems. Backup systems should be redundantly anchored completely independent of the primary system so that protection is provided in the event of a failure of the primary system.

## Emergency Operations

In an emergency rescue / retrieval application, OSHA does not require independent lifelines. The rescue team is responsible for using the appropriate equipment and performing a safe, timely rescue.

Review applicable regulations for confined space rescue / retrieval, fall arrest system requirements.

Personnel operating the equipment used for raising, lowering or suspending personnel shall be protected from falls by using appropriate fall protection systems (examples: guard rails, restraint system, fall arrest system) if they are near an exposed manhole, opening or other fall hazard.

The need for separate / independent / back up fall arrest systems depends on the work application. 3M Fall Protection recommends the use of a fall arrest system, unless the competent person determines the use of the system will create a greater hazard to personal. Typical fall arrest systems that can be used for backup / independent lifelines include self-retracting lifelines (including those with rescue / retrieval capabilities) and lifeline / rope grab systems.

3M Fall Protection remains committed to providing high quality products and services to our customers. If you have any additional questions or concerns regarding this technical bulletin, please contact our Technical Service department immediately at 800-328-6146.

### **IMPORTANT NOTE**

Refer to the 3M *User Instructions* provided with your product for additional information.

#### **3M Personal Safety Division**

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