# 1. SIT 5908512 - Rev. A

## 1.1. Safety Information

Please read, understand, and follow all safety information contained in these instructions, prior to the use of this product. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.

These instructions must be provided to the user of the equipment. Retain these instructions for future reference.

## 1.2. Intended Use

This product is used as part of a complete Fall Protection system.

Use in any other application including, but not limited to, material handling, recreational or sports related activities, or other activities not described in these instructions, is not approved by 3M and could result in serious injury or death.

This product is only to be used by trained users in workplace applications.

## 1.3. WARNING

This product is used as part of a complete Fall Protection system.

All users must be fully trained in the safe installation and operation of their complete Fall Protection system. Misuse of this product could result in serious injury or death. For proper selection, operation, installation, maintenance, and service, refer to all instruction manuals and manufacturer recommendations. For more information, see your supervisor or contact 3M Technical Services.

- To reduce the risks associated with working with 3M Connectors which, if not avoided, could result in serious injury or death:
  - Inspect the product before each use and after any fall event, in accordance with the procedures defined in these instructions.
  - If inspection reveals an unsafe or defective condition, remove the product from service immediately and clearly mark it “DO NOT USE.” Refer to these instructions for disposal or repair.
  - Any product that has been subject to fall arrest or impact force must be immediately removed from service. Refer to these instructions for disposal or repair.
  - Ensure that Fall Protection systems assembled from components made by different manufacturers are compatible and meet the requirements of applicable Fall Protection regulations, standards, or requirements. Always consult a Competent or Qualified Person before using these systems.
  - Always maintain 100-percent tie-off.

  - Do not twist, tie, knot, or allow slack in the lifeline.
  - Use caution when installing, using, or moving the device as moving parts may create pinch points.

- To reduce the risks associated with working at height which, if not avoided, could result in serious injury or death:
  - Your health and physical condition must allow you to safely work at height and to withstand all forces associated with a fall arrest event. Consult your doctor if you have questions regarding your ability to use this equipment.
  - Never exceed allowable capacity of your Fall Protection equipment.
  - Never exceed the maximum free fall distance specified for your Fall Protection equipment.
  - Do not use any Fall Protection equipment that fails inspection, or if you have concerns about the use or suitability of the equipment. Contact 3M Technical Services with any questions.
  - Some subsystem and component combinations may interfere with the operation of this equipment. Only use compatible connections. Contact 3M Technical Service prior to using this equipment in combination with components or subsystems other than those described in these instructions.
  - Use extra precautions when working around moving machinery, electrical hazards, extreme temperatures, chemical hazards, explosive or toxic gases, sharp edges, abrasive surfaces, or below overhead materials that could fall onto you or your Fall Protection equipment.
  - Ensure use of your product is rated for the hazards present in your work environment.
  - Ensure there is sufficient fall clearance when working at height.
  - Never modify or alter your Fall Protection equipment. Only 3M, or persons authorized in writing by 3M, may make repairs to 3M equipment.
  - Before using Fall Protection equipment, ensure a written rescue plan is in place to provide prompt rescue if a fall incident occurs.
  - If a fall incident occurs, immediately seek medical attention for the fallen worker.
  - Only use a Full Body Harness for Fall Arrest applications. Do not use a body belt.
  - Minimize swing falls by working as directly below the anchorage point as possible.
  - A secondary Fall Protection system must be used when training with this product. Trainees must not be exposed to an unintended fall hazard.
  - Always wear appropriate Personal Protective Equipment when installing, using, or inspecting the product.
  - Never work below a suspended load or worker.

# 1. Product Description

**WARNING:** Before using this equipment, record the product identification information from the ID label in the "Inspection and Maintenance Log" at the back of this manual.

**WARNING:** Always ensure you are using the latest revision of your 3M instruction manual. Visit the 3M website or contact 3M Technical Services for updated instruction manuals.

**Summary:**

3M Connectors are designed to be used as end connectors for anchorage systems in Fall Protection applications. The system application of your connector will depend on the type of connector you are using.

Your 3M Connector will be one of four classes: A, B, Q, or T, as defined by EN 362:2004. Please see Figure 1 for information specific to your 3M Connector. See "Connector Specifications" below for class identification.

Figure 2 illustrates key components of 3M Connectors. The Gate Release (A) opens to enable attachment and removal of the 3M Connector from an anchorage point. The Connection Eye (B) provides a second connection point for Class A and Class T Connectors.

**Table 1:** ***PRODUCT SPECIFICATIONS***

| **System Specifications:** | |
|---|---|
| Capacity: | One person with a combined weight (clothing, tools, etc.) of no more than 140 kg (310 lb.). |
| Anchorage: | The concrete structure to which the Anchorage Connector is mounted must be capable of sustaining force in the anticipated directions of loading. Each anchorage point must be capable of sustaining 12 kN (2,698 lbf) per EN 795:2012. |
| Dimensions: | See Figure 1 for the dimensions of your 3M Connector. |
| Standards: | Designed to meet the test requirements of EN 362:2004. |

| **Component Specifications:** | | |
|---|---|---|
| **Figure 2 Reference** | **Component** | **Description** |
| A | Gate Release | See Figure 1 for specifications. |
| B | Connection Eye | Present only on Class A and Class T Connectors. |

| **Connector Specifications:** | | |
|---|---|---|
| **Figure 2 Reference** | **Connector Type** | **Description** |
| 1 | Class A | Anchor Connector |
| 2 | Class B | Basic Connector |
| 3 | Class Q | Screwlink Connector |

| Connector Specifications: | | |
|---|---|---|
| **Figure 2 Reference** | **Connector Type** | **Description** |
| 4 | Class T | Termination Connector |

# 1. Product Application

## 1.1. Purpose

3M Connectors are designed to secure Fall Protection systems and connecting subsystems to anchorage connection points and attachment elements located on the user. For more information on product applications, refer to Table 1.

**WARNING:** This product is for use in Fall Protection applications only.

## 1.2. Standards

Your product conforms to the national or regional standards identified on the front cover of these instructions. If this product is resold outside the original country of destination, the re-seller must provide these instructions in the language of the country in which the product will be used.

## 1.3. Supervision

Use of this equipment must be supervised by a Competent Person.

## 1.4. Training

This equipment must be installed and used by persons trained in its correct application. These instructions are to be used as part of an employee training program as required by national, regional, or local standards. It is the responsibility of the users and installers of this equipment to ensure they are familiar with these instructions, trained in the correct care and use of this equipment, and are aware of the operating characteristics, application limitations, and consequences of improper use of this equipment.

## 1.5. Rescue Plan

When using this equipment and connecting subsystem(s), the employer must have a written rescue plan and the means to implement and communicate that plan to users, authorized persons, and rescuers. A trained, on-site rescue team is recommended. Team members should be provided with the equipment and techniques necessary to perform a successful rescue. Training should be provided on a periodic basis to ensure rescuer proficiency. Rescuers should be provided with these instructions. There should be visual contact or means of communication with the person being rescued at all times during the rescue process.

## 1.6. Inspection Frequency

The product shall be inspected by the user before each use and, additionally, by a Competent Person other than the user at intervals of no longer than one year. A higher frequency of equipment use and harsher conditions may require increasing the frequency of Competent Person inspections. The frequency of these inspections should be determined by the Competent Person per the specific conditions of the worksite. Inspection procedures are described in the “Inspection and Maintenance Log”. Results of each Competent Person inspection should be recorded in the “Inspection and Maintenance Log”.

## 1.7. After a Fall

If this equipment is subjected to fall arrest or impact force, remove it from service immediately. Clearly tag it “DO NOT USE”. See Section 5 for more information.

# 1. System Requirements

## 1.1. Anchorage

Anchorage requirements vary with the Fall Protection application. The mounting structure on which the equipment is placed must meet the Anchorage specifications defined in Table 1.

## 1.2. Environmental Hazards

Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to: high heat, chemicals, corrosive environments, high voltage power lines, explosive or toxic gases, moving

machinery, sharp edges, or overhead materials that may fall onto the user or equipment. Contact 3M Technical Services for further clarification.

## 1.3. Fall Clearance

Consider each component of your Fall Arrest system when determining Required Fall Clearance. There must be sufficient Fall Clearance to arrest a fall before the user strikes an obstruction. For more information on Fall Clearance requirements, refer to the instructions included with your connecting subsystem.

## 1.4. Component Compatibility

3M equipment is designed for use with 3M equipment. Use with non-3M equipment must be approved by a Competent Person. Substitutions made with non-approved equipment may jeopardize equipment compatibility and may affect the safety and reliability of your Fall Protection system. Read and follow all instructions and warnings for all equipment prior to use.

## 1.5. Connector Compatibility

Connectors are compatible with connecting elements when the size and shape of either component does not cause the connector to inadvertently open, regardless of orientation. Connectors must comply with applicable standards. Connectors must be fully closed and locked during use.

3M Connectors (snap hooks and carabiners) are designed to be used only as specified in each instruction manual. Ensure connectors are compatible with the system components to which they are connected. Do not use equipment that is non-compatible. Use of non-compatible components may cause the connector to unintentionally disengage (see Figure 5). If the connecting element to which a connector attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the connector (A). This force could then cause the gate to open (B), disengaging the connector from the connecting element (C).

## 1.6. Making Connections

All connections must be compatible in size, shape, and strength. See Figure 6 for examples of inappropriate connections. Do not attach snap hooks and carabiners:

1) To a D-Ring to which another connector is attached.
2) In a manner that would result in a load on the gate. Large-throat snap hooks should not be connected to standard-size D-Rings or other connecting elements, unless the snap hook has a gate strength of 16 kN (3,600 lbf) or greater.
3) In a false engagement, where size or shape of the connector or connecting element is not compatible and, without visual confirmation, would seem to be fully engaged.
4) To each other.

5) Directly to webbing or rope lanyard or tie-back material, unless the instruction manuals for both the lanyard and connector specifically allow such a connection.
6) To any object whose size or shape does not allow the connector to fully close and lock, or that could cause connector roll-out.
7) In a manner that does not allow the connector to align properly while under load.

# 1. Installation

## 1.1. Planning

Plan your Fall Protection systme prior to installation of the 3M Connector. Account for all factors thta may affect your safety before, during, and after a fall. Consider all requirements, limitations, and specifications defined in Section 2 and Table 1.

## 1.2. Attachment

It is recommended that 3M Connectors with a self-closing or manual-locking gate be used only in situations where the user does not have to attach and remove the connector frequently.

**WARNING:** Screwlink connectors (Class Q) are only safe for use when the screw-motion gate is fully closed. The gate is fully closed when it can be tightened no further.

# 1. Use

## 1.1. Before Each Use

Verify that your work area and Fall Protection system meet all criteria defined in Section 2 and that a formal Rescue Plan is in place. Inspect the 3M Connector per the ‘User’ inspection points defined on the “Inspection and Maintenance Log”. If inspection reveals an unsafe or defective condition, do not use the system. Remove the system from service and destroy, or contact 3M regarding replacement or repair.

## 1.2. Fall Arrest Connections

The 3M Connector is used with a Full Body Harness and an Energy Absorbing Lanyard or Self-Retracting Device (SRD). Figure 10 illustrates connection of the Lanyard (A) or SRD (B) between the Harness and 3M

Connector. Connect the SRD between the connection eye on the 3M Connector and the back Dorsal D-Ring on the Harness as instructed in the instructions included with the Lanyard or SRD.

# 1. Inspection

## 1.1. Inspection Procedures

Inspect the 3M Connector per the procedures listed in the Inspection and Maintenance Log. Inspect all other components of your Fall Protection system per the frequencies and procedures defined in the manufacturer instructions.

## 1.2. Defects

If the product is unable to return to service because of an existing defect or unsafe condition, then the product must be destroyed.

## 1.3. Product Life

The functional life of the product is determined by work conditions and maintenance. As long as the product passes inspection criteria, it may remain in service, for up to a maximum of 10 years.

# 1. Maintenance, Service, and Storage

## 1.1. Cleaning

CONTEXT:

Do not attempt to disassemble the 3M Connector or lubricate any parts. Do not attempt to clean any interior pieces. To clean the 3M Connector:

1. Clean the exterior of the 3M Connector using water and a mild soap solution.
2. Rinse the 3M Connector after wash. Rinse must not exceed 40 degrees Celsius (104 degrees Fahrenheit).
3. After rinse, allow the 3M Connector to air dry. Do not apply heat when wet.
4. Disinfect the 3M Connector, if necessary.

   A disinfectant should be selected that does not cause damage to the 3M Connector.

## 1.2. Service

Only 3M or parties authorized in writing by 3M may make repairs to this equipment.

## 1.3. Storage and Transport

When not in use, store and transport the 3M Connector and associated Fall Protection equipment in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect components after extended storage.

# 1. Labels and Markings

## 1.1. Labels

Figure 1 contains the informational label for the 3M Connector. Information on the label is as follows:

| | |
|---|---|
| A | EU Type Examination |
| B | Conformity to Type |
| C | Product Material |
| D | Product Weight |
| E | Product Dimensions |
| F | Gate Type |
| G | Tensile Strength |
| H | Applicable Standard and Connector Type |
| I | Item Number |
| J | Article Number |

## 1.2. Markings

Figure 5 illustrates markings on the 3M Connector. Information on each marking is as follows:

| | |
|---|---|
| A | CE Marking of European Conformity |

| | |
|---|---|
| B | Number of Notified Body carrying out Conformity to Type |
| C | Applicable Standard |
| D | Connector Type |
| E | Manufactured Year and Month |
| F | Manufacturer |
| G | Article Number |
| H | Gate Opening (in millimeters) |
| I | Material (Circle = Steel, Square = Aluminum) |
| J | Read all instructions. |
| K | Minimum Breaking Strength |

# 1. Inspection and Maintenance Log

**Table 2:** ***INSPECTION AND MAINTENANCE LOG***

| **Inspection Date:** | | **Inspected By:** | |
|---|---|---|---|
| **Components:** | **Inspection:** | **User** | **Competent Person** |
| 3M Connector (Figure 2) | Inspect the Connector for damage, bending, and wear of the metal. | ☐ | ☐ |
| | Inspect the Gate Release (A). Verify that it opens and closes with action of the button. The gate should not stick at any point. | ☐ | ☐ |
| | Inspect the Connector for corrosion. Inspect for cracks or wear that may affect strength and operation. | ☐ | ☐ |
| Labels/Markings (Figure 5) | Verify that all labels and markings are present and fully legible. | ☐ | ☐ |
| Fall Protection System | Additional Fall Protection equipment used with the product should be installed and inspected per the manufacturer instructions. | ☐ | ☐ |

| | |
|---|---|
| Serial Number(s): | Date Purchased: |
| Model Number: | Date of First Use: |

| | | |
|---|---|---|
| Maintenance: | Approved By: | Next inspection due: |
| | Date: | |
| Maintenance: | Approved By: | Next inspection due: |
| | Date: | |
| Maintenance: | Approved By: | Next inspection due: |
| | Date: | |
| Maintenance: | Approved By: | Next inspection due: |
| | Date: | |

# 1. Glossary of Terms

**Authorized Person**

A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard.

**Competent Person**

One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

**Fall Arrest System**

A collection of Fall Protection equipment configured to protect the user in the event of a fall.

**Qualified Person**

A person with a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated their ability to solve or resolve problems relating to Fall Protection and Rescue systems to the extent required by applicable national, regional, and local regulations.

**Rescue System**

A collection of Fall Protection equipment configured to remove a person from hazards to a safe location. No free fall is permitted.

**Rescuer**

A person using the Rescue system to perform an assisted rescue.

**Restraint System**

A collection of Fall Protection equipment configured to prevent the user from reaching a fall hazard. No free fall is permitted.

**User**

A person who performs activities while protected by a Fall Protection system.

**Work Positioning System**

A collection of Fall Protection equipment configured to support a user at a work position. Maximum permissible free fall is 2 ft (61 cm).

# 1. Global Product Warranty

**WARRANTY:** The following is made in lieu of all warranties or conditions, express or implied, including the implied warranties or conditions of merchantability or fitness for a particular purpose.

Unless otherwise provided by local laws, 3M fall protection products are warranted against factory defects in workmanship and materials for a period of one year from the date of installation or first use by the original owner.

**LIMITED REMEDY:** Upon written notice to 3M, 3M will repair or replace any product determined by 3M to have a factory defect in workmanship or materials. 3M reserves the right to require product be returned to its facility for evaluation of warranty claims. This warranty does not cover product damage due to wear, abuse, misuse, damage in transit, failure to maintain the product or other damage beyond 3M's control. 3M will be the sole judge of product condition and warranty options.

This warranty applies only to the original purchaser and is the only warranty applicable to 3M's fall protection products. Please contact 3M's customer service department in your region for assistance.

**LIMITATION OF LIABILITY:** To the extent permitted by local laws, 3M is not liable for any indirect, incidental, special, or consequential damages including, but not limited to, loss of profits in any way related to the products regardless of the legal theory asserted.