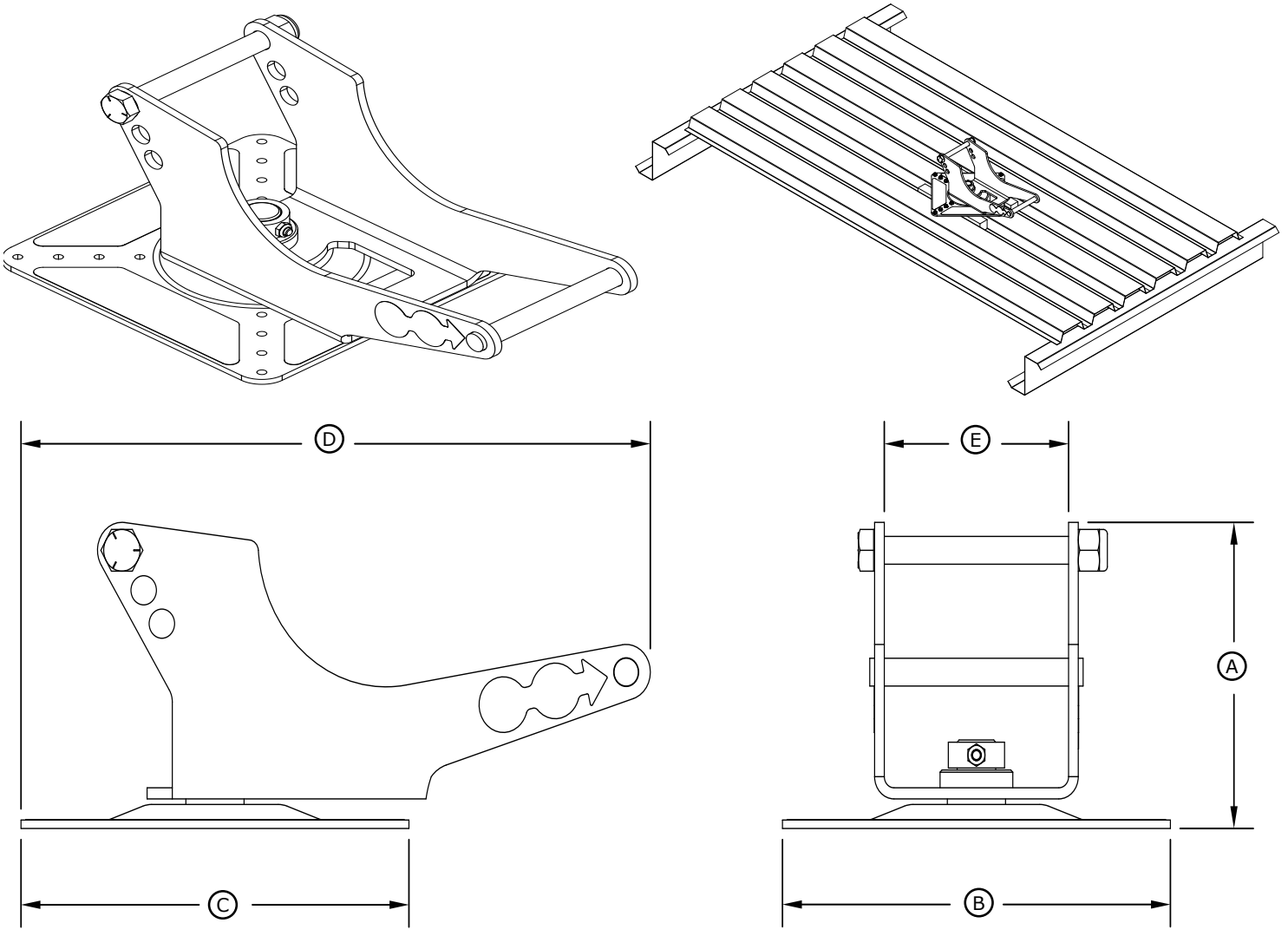
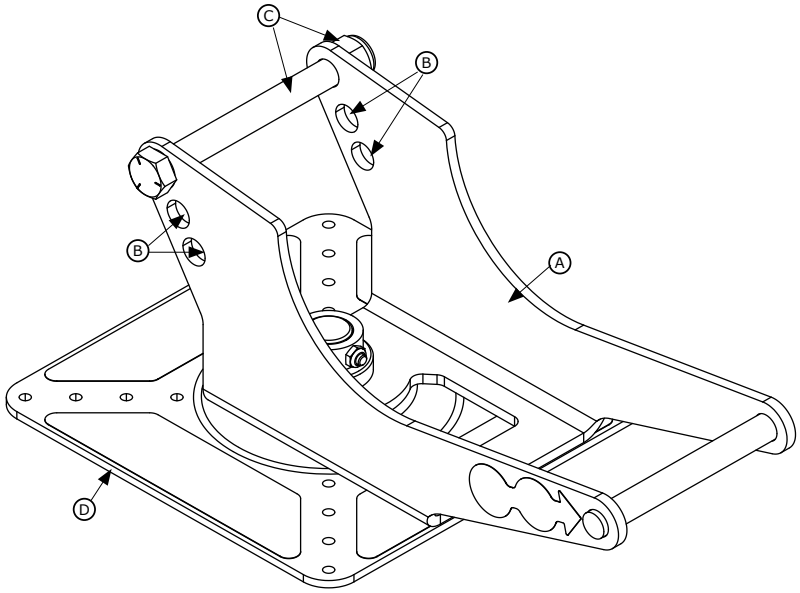
Fall Protection

SWIVELING METAL/WOOD ROOF ANCHOR
Anchorage Connector
USER INSTRUCTION MANUAL

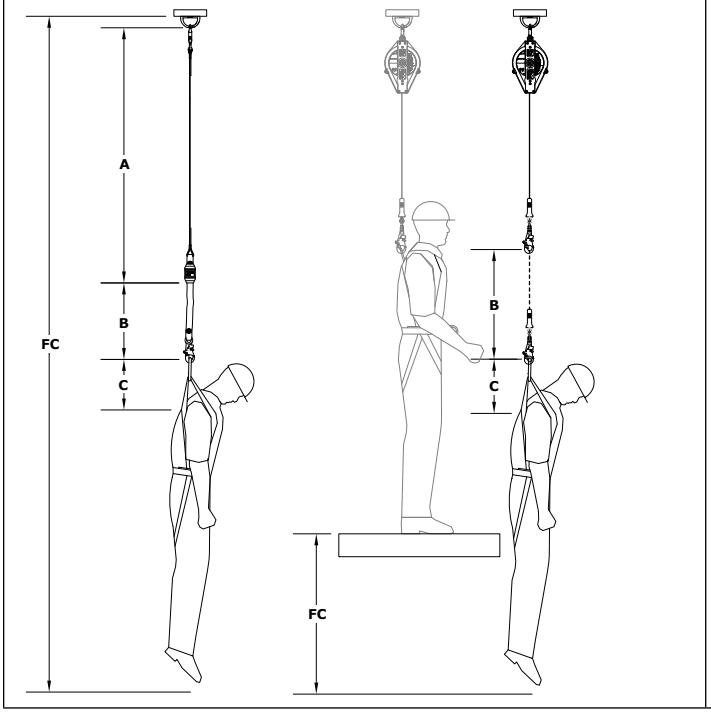
1					
	A	**B**	**C**	**D**	**E**
2190070	6.88 in. (17.48 cm)	10 in. (25.40 cm)	10 in. (25.40 cm)	16.22 in. (41.20 cm)	4.75 in. (12.07 cm)



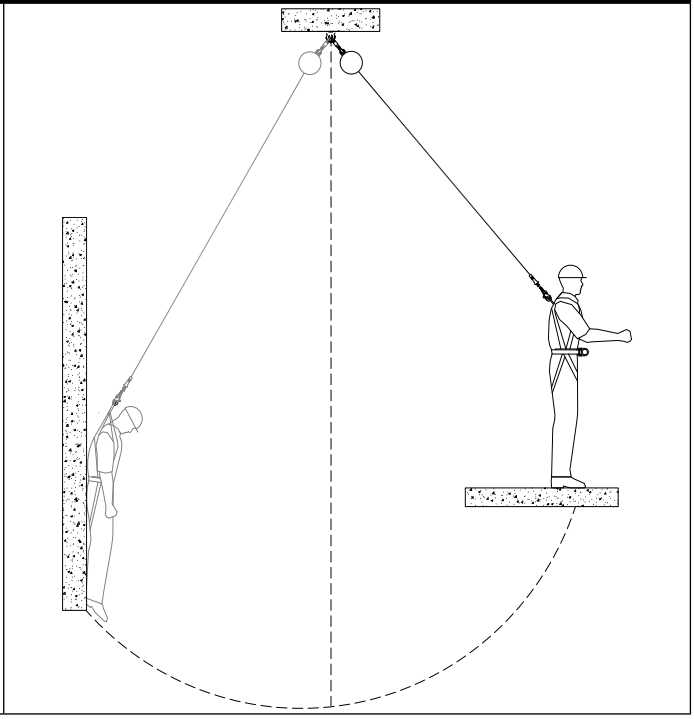
2



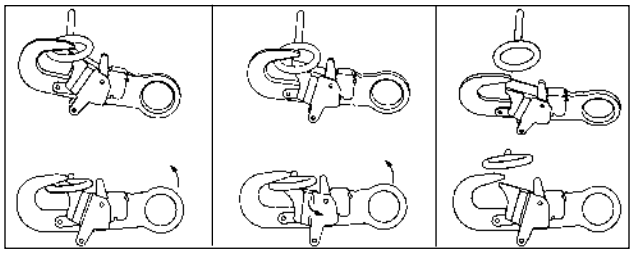
3



4

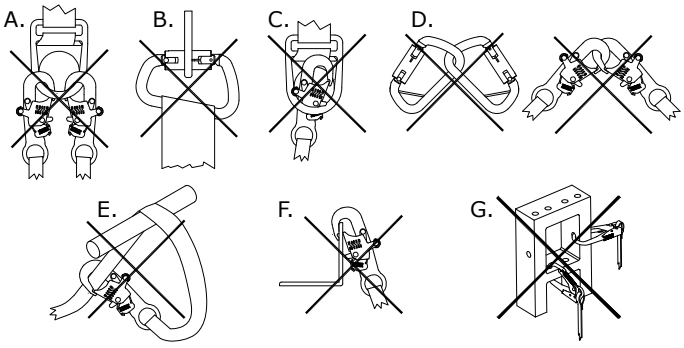


5

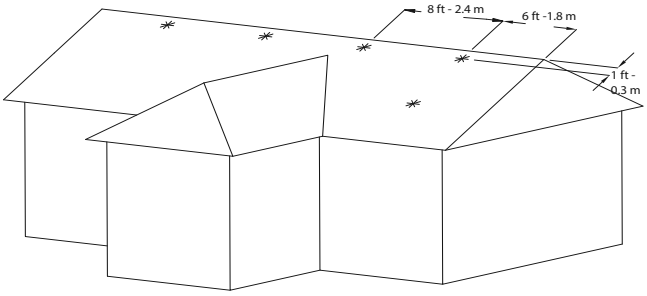


A B C

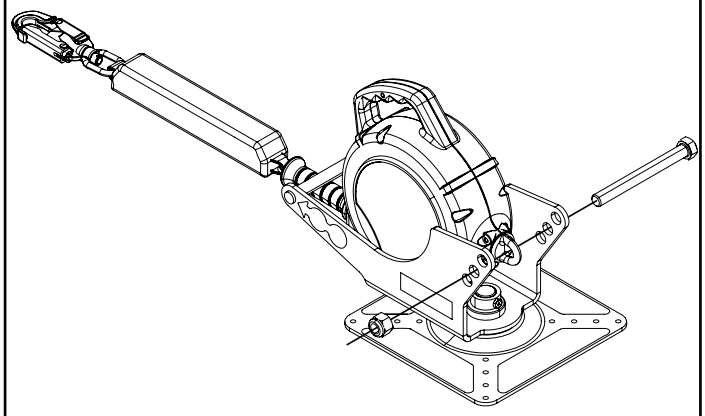
6



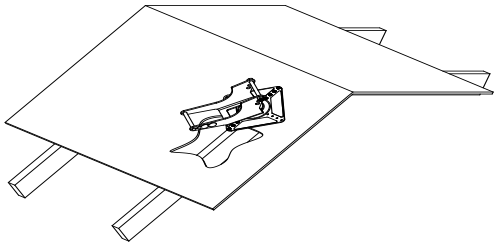
7

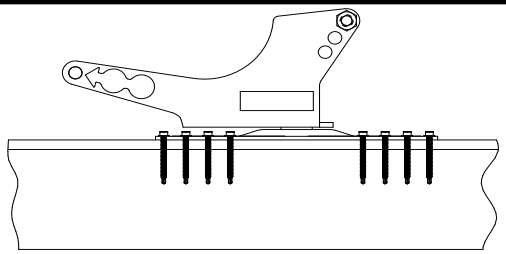


8

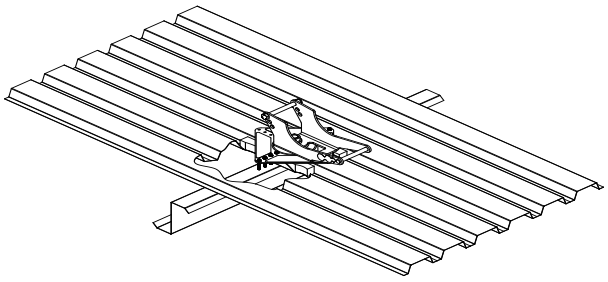


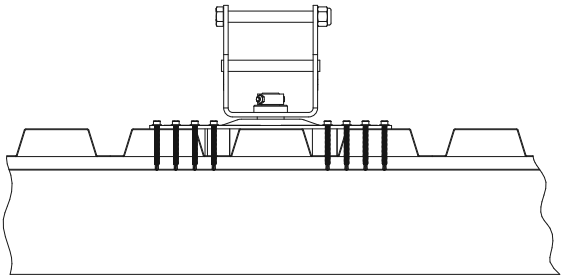
9



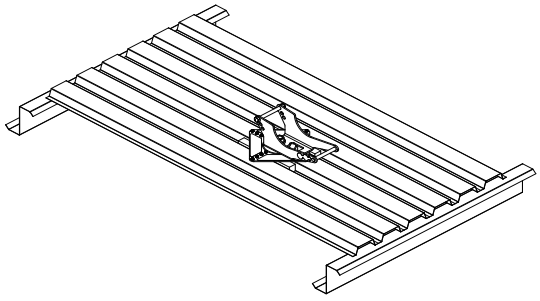


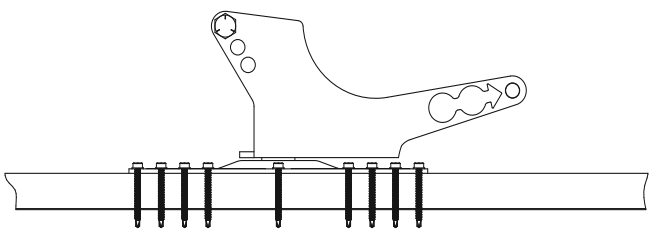
10

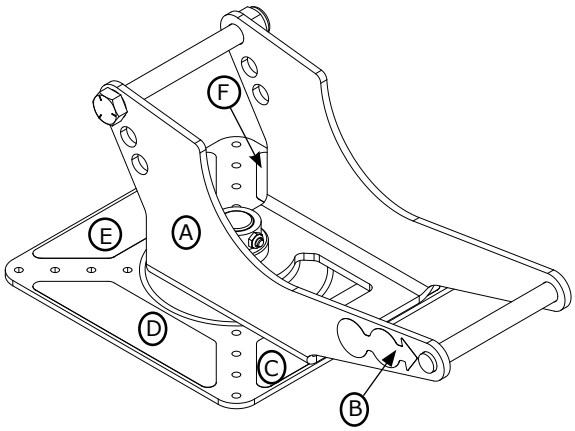




11







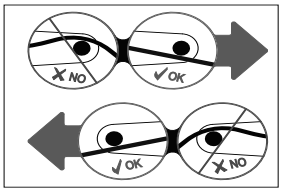
A

3M | PROTECTA Fall Protection

9508161 Rev. C

MFRD. (YR, MO) / FABR. (AN, MO): LOT #: MODEL NO / N° DE MODELE:

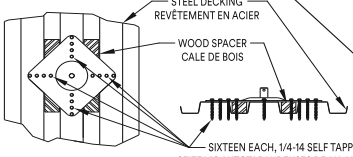
B



C

STEEL DECKING INSTALLATION / INSTALLATION SUR REVÊTEMENT EN ACIER

INSTALL OVER SECURED STEEL DECKING. DECKING MUST BE 22 GAUGE MINIMUM MATERIAL THICKNESS, AND MUST BE SUPPORTED AT A MAXIMUM INTERVAL OF 72". USE SIXTEEN 1/4-14 SELF-TAPPING SCREWS. ALL SCREWS MUST BE SUFFICIENT LENGTH TO HAVE A MINIMUM OF 5 THREADS PROTRUDING THROUGH DECKING MATERIAL. WOOD SPACERS MUST BE USED TO FILL GAPS IN DECKING MATERIAL. SEE USER MANUAL FOR ADDITIONAL DETAILS. / INSTALLEZ SUR LE REVÊTEMENT FIXÉ AU TOIT. LE MATÉRIAU DU TOIT DOIT ÊTRE D'UNE ÉPAISSEUR DE CALIBRE 22 AU MOINS ET DOIT ÊTRE SOUTENU À UN INTERVALLE MAXIMUM DE 72 PO. UTILISER SEIZE VIS AUTOTARAUDEUSES DE 1/4-14. TOUTES LES VIS DOIVENT ÊTRE D'UNE LONGUEUR SUFFISANTE POUR QU'AU MOINS 5 FILETS DÉPASSENT DU REVÊTEMENT. UTILISEZ DES CALES DE BOIS POUR REMPLIR LES INTERSTICES DANS LE REVÊTEMENT DU TOIT. CONSULTEZ LE GUIDE D'UTILISATION POUR D'AUTRES DÉTAILS.

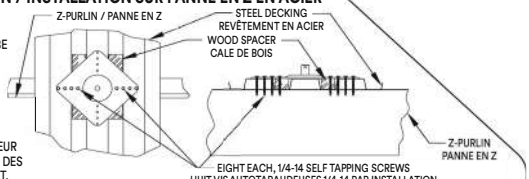


SHOWN WITHOUT SRL OR SWIVELING BRACKET / MONTRÉ SANS SRL OU SUPPORT PIVOTANT

D

STEEL Z-PURLIN INSTALLATION / INSTALLATION SUR PANNE EN Z EN ACIER

INSTALL OVER SECURED ROOF DECKING, USE EIGHT EACH 1/4-14 SELF-TAPPING SCREWS. ALL SCREWS MUST ENGAGE CENTER OF Z-PURLIN, AND BE OF SUFFICIENT LENGTH TO HAVE A MINIMUM OF 5 THREADS PROTRUDING THROUGH PURLIN MATERIAL. WOOD SPACERS MUST BE USED TO FILL GAPS IN ROOF DECKING MATERIAL. SEE USER MANUAL FOR ADDITIONAL DETAILS. / INSTALLEZ SUR LE REVÊTEMENT FIXÉ AU TOIT. UTILISEZ HUIT VIS AUTOTARAUDEUSES ¼-14 PAR INSTALLATION. TOUTES LES VIS DOIVENT PÉNÉTRER AU CENTRE DE LA PANNE EN Z ET ÊTRE D'UNE LONGUEUR SUFFISANTE POUR QU'AU MOINS 5 FILETS DÉPASSENT DE LA PANNE. UTILISEZ DES CALES DE BOIS POUR REMPLIR LES INTERSTICES DANS LE REVÊTEMENT DU TOIT. CONSULTEZ LE GUIDE D'UTILISATION POUR D'AUTRES DÉTAILS.

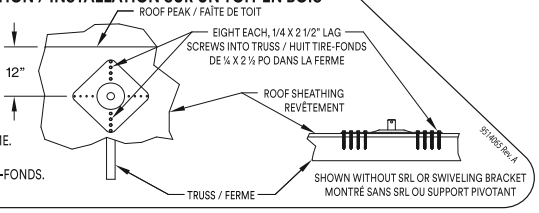


SHOWN WITHOUT SRL OR SWIVELING BRACKET / MONTRÉ SANS SRL OU SUPPORT PIVOTANT

E

WOOD ROOF INSTALLATION / INSTALLATION SUR UN TOIT EN BOIS

INSTALL OVER SECURED ROOF SHEATHING. USE EIGHT EACH 1/4 x 2 1/2" LAG SCREWS. SCREWS MUST ENGAGE CENTER OF TRUSS. TO PREVENT SPLITTING, SOME WOOD TYPES MAY REQUIRE PRE-DRILLING LAG SCREW HOLES WITH A 3/16" DRILL. SEE USER MANUAL FOR ADDITIONAL DETAILS. / UTILISEZ HUIT TIRE-FONDS DE ¼ X 2 ½ PO. LES TIRE-FONDS DOIVENT PÉNÉTRER AU CENTRE DE LA FERME. POUR ÉVITER DE FENDRE CERTAINES ESPÈCES DE BOIS, IL PEUT ÊTRE NÉCESSAIRE DE PERCER DES TROUS-GUIDES DE 3/16 PO POUR LES TIRE-FONDS. CONSULTEZ LE GUIDE D'UTILISATION POUR LES DÉTAILS.



SHOWN WITHOUT SRL OR SWIVELING BRACKET
MONTRÉ SANS SRL OU SUPPORT PIVOTANT

F

SWIVELING STEEL ROOF ANCHOR
ANCRAGE DE TOIT EN ACIER PIVOTANT

INSPECTION:
Inspect anchor before each use. Do not use if inspection reveals an unsafe or defective condition. Not user repairable. / Inspectez l'ancrage avant chaque utilisation. Si une inspection révèle un état non sécuritaire ou douteux, n'utilisez pas cet équipement. N'est pas réparable par l'utilisateur. 9514061 Rev. A

INSPECTION LOG
JOURNAL D'INSPECTION

DATE	INITIAL INITIALES	DATE	INITIAL INITIALES

3M.com/FallProtection

SPECIFICATIONS / CARACTÉRISTIQUES TECHNIQUES:
Materials: Carbon Steel
Capacity: 1 person, 420 lbs
Meets OSHA requirements
Matériaux: Acier ordinaire
Capacité: 1 personne, 191 kg
Répond aux exigences des normes OSHA.

⚠ WARNING / AVERTISSEMENT

Manufacturer's instructions supplied with this product at time of delivery must be followed. Failure to do so could result in serious injury or death. The anchorage connector is intended to couple a personal fall arrest system to an anchorage. If wear or damage exist, do not use. See user manual for details. Items subject to fall arrest or impact forces must be immediately removed from service and destroyed. Connecting snap and d-ring must be compatible in size, shape, and strength. / Les instructions du fabricant fournies avec ce produit au moment de la livraison doivent être observées. Le non-respect de ces instructions peut entraîner de graves blessures, voire la mort. Ce connecteur d'ancrage est conçu pour coupler un système antichute personnel à un ancrage. En cas d'usure ou de dommages, ne pas utiliser cet équipement. Voir le guide d'utilisation pour les détails. L'équipement qui a été soumis à des forces d'arrêt ou à un choc doit être immédiatement retiré du service et détruit. Le mousqueton et l'anneau en D doivent être compatibles en termes de taille, de forme et de résistance.

SAFETY INFORMATION

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

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

Intended Use:

This Anchorage Connector is intended for use as part of a complete personal 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 the User Instructions, is not approved by 3M and could result in serious injury or death.

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

⚠ WARNING

This Anchorage Connector is part of a personal fall protection system. It is expected that all users be fully trained in the safe installation and operation of their personal fall protection system. **Misuse of this device could result in serious injury or death.** For proper selection, operation, installation, maintenance, and service, refer to these User Instructions and all manufacturer recommendations, see your supervisor, or contact 3M Technical Service.

- **To reduce the risks associated with working with an Anchorage Connector which, if not avoided, could result in serious injury or death:**
  - Inspect the device before each use, at least annually, and after any fall event. Inspect in accordance with the User Instructions.
  - If inspection reveals an unsafe or defective condition, remove the device from service and repair or replace according to the User Instructions.
  - Any device that has been subject to fall arrest or impact force must be immediately removed from service and destroyed.
  - The device must only be installed in the specified substrates or on structures detailed in the User Instructions. Installations and use outside the scope of this instruction must be approved by 3M Fall Protection.
  - The substrate or structure to which the anchorage connector is attached must be able to sustain the static loads specified for the anchor in the orientations permitted in the User Instructions.
  - Only connect other fall protection subsystems to the designated anchorage connection point on the device.
  - Prior to drilling or fastening, ensure no electric lines, gas lines, or other critical embedded systems will be contacted by the drill or the device.
  - Ensure that fall protection systems/subsystems assembled from components made by different manufacturers are compatible and meet the requirements of applicable standards, including the ANSI Z359 or other applicable fall protection codes, standards, or requirements. Always consult a Competent or Qualified Person before using these systems.
  - (ROOF ANCHORS) Never attach a horizontal lifeline between two or more roof anchors unless specifically provided for in the User Instructions.
  - (ROOF ANCHORS) Only attach device to roof sheathing that is appropriately secured to a structural member that can sustain the static loads required by this device.
  - (ROOF ANCHORS) Only use fasteners specified for use with this device. Other fastener types must be approved by 3M.

- **To reduce the risks associated with working at height which, if not avoided, could result in serious injury or death:**
  - Ensure your health and physical condition allow you to safely withstand all of the forces associated with working at height. Consult with your doctor if you have any questions regarding your ability to use this equipment.
  - Never exceed allowable capacity of your fall protection equipment.
  - Never exceed maximum free fall distance of your fall protection equipment.
  - Do not use any fall protection equipment that fails pre-use or other scheduled inspections, or if you have concerns about the use or suitability of the equipment for your application. Contact 3M Technical Services with any questions.
  - Some subsystem and component combinations may interfere with the operation of this equipment. Only use compatible connections. Consult 3M prior to using this equipment in combination with components or subsystems other than those described in the User Instructions.
  - Use extra precautions when working around moving machinery (e.g. top drive of oil rigs) electrical hazards, extreme temperatures, chemical hazards, explosive or toxic gases, sharp edges, or below overhead materials that could fall onto you or your fall protection equipment.
  - Use Arc Flash or Hot Works devices when working in high heat environments.
  - Avoid surfaces and objects that can damage the user or equipment.
  - Ensure there is adequate fall clearance when working at height.
  - Never modify or alter your fall protection equipment. Only 3M or parties authorized in writing by 3M may make repairs to the equipment.
  - Prior to use of fall protection equipment, ensure a rescue plan is in place which allows for prompt rescue if a fall incident occurs.
  - If a fall incident occurs, immediately seek medical attention for the worker who has fallen.
  - Do not use a body belt for fall arrest applications. Use only a Full Body Harness.
  - Minimize swing falls by working as directly below the anchorage point as possible.
  - If training with this device, a secondary fall protection system must be utilized in a manner that does not expose the trainee to an unintended fall hazard.
  - Always wear appropriate personal protective equipment when installing, using, or inspecting the device/system.

☑ *Prior to installation and use of this equipment, record the product identification information from the ID label in the Inspection and Maintenance Log (Table 2) at the back of this manual.*

PRODUCT DESCRIPTION:

Figure 1 illustrates the 3M™ Protecta™ Swiveling Roof Anchor. The Swiveling Roof Anchor is a single point anchorage connector for mounting Leading Edge Self-Retracting Lifelines (SRL-LE) on a wood or steel roof. The Swiveling Roof Anchor can be used with Rebel Leading Edge Self-Retracting Lifelines.

Figure 2 illustrates components of the Swiveling Roof Anchor. See Table 1 for Component Specifications. The Swiveling Roof Anchor is comprised of an Anchor Base Plate (D), 360 degree Swivel Bracket (A), and SRL Mounting Hardware (C) for securing the SRL-LE into SRL Mounting Holes (B). The Swiveling Roof Anchor is secured to the roof with included hardware.

Table 1 – Specifications

System Specifications:	
Capacity:	1 Person with a combined weight (clothing, tools, etc.) of no more than 420 lbs (191 kg)[1].
Anchorage:	**Fall Arrest:** The structure to which the Anchorage Connector is attached must sustain static loads applied in the directions permitted by the Fall Arrest System of at least: 3,600 lbs (16 kN) with certification of a Qualified Person[2]; or 5,000 lbs (22 kN) without certification. When more than one Personal Fall Arrest System (PFAS) is attached to an anchorage, these static loads must be multiplied by the number of PFAS attached to the anchorage. ☑ **OSHA 1926.500 and OSHA 1910.66:** *Anchorages used for attachment to a Personal Fall Arrest System (PFAS) must be independent of any anchorage used to suspend or support platforms and must support 5,000 lbs (22 kN) per user attached, or be designed, installed, and used as part of a complete PFAS which maintains a Safety Factor of at least 2 and is supervised by a Qualified Person[2].* **Restraint:** The structure to which the Anchorage Connector is attached must sustain static loads applied in the directions permitted by the Restraint System of at least 3,000 lbs (13 kN). When more than one Restraint System is attached to an anchorage, the static load must be multiplied by the number of Restraint Systems attached to the anchorage.
Dimensions:	See Figure 1 for the dimensions of each Swiveling Roof Anchor model.
Weight:	13.8 lbs without SRL

Component Specifications:			
Figure 2 Reference	**Component**	**Materials**	**Note:**
Ⓐ	Swivel Bracket	Steel Plate	
Ⓑ	SRL Mounting Holes	Steel Weldment	
Ⓒ	SRL Mounting Hardware	Steel	
Ⓓ	Anchor Base Plate	Steel Plate	

1 Capacity: *This product has been tested to a 420 lbs (191 kg) Maximum Capacity per OSHA.*

2 Qualified Person: *An individual with a recognized degree or professional certificate, and extensive experience in Fall Protection. This individual must be capable of design, analysis, evaluation, and specification in Fall Protection.*

1.0 PRODUCT APPLICATION

1.1 PURPOSE: Anchorage Connectors are designed to provide anchorage connection points for Fall Arrest[1] or Fall Restraint[2] systems: Restraint, Work Positioning, Personnel Riding, Rescue, etc.

> ☑ ***Fall Protection Only:*** *This Anchorage Connector is for connection of Fall Protection Equipment. Do not connect Lifting Equipment to this Anchorage Connector.*

1.2 STANDARDS: Your Anchorage Connector conforms to the national or regional standard(s) 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[3].

1.4 TRAINING: This equipment must be installed and used by persons trained in its correct application. This manual is to be used as part of an employee training program as required by ANSI and OSHA. 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 rescue plan and the means at hand to implement and communicate that plan to users, authorized persons[4], and rescuers[5]. A trained, on-site rescue team is recommended. Team members should be provided with the equipment and techniques to perform a successful rescue. Training should be provided on a periodic basis to ensure rescuer proficiency.

1.6 INSPECTION FREQUENCY: The Anchorage Connector 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.[6] Inspection procedures are described in the *"Inspection and Maintenance Log"*. Results of each Competent Person inspection should be recorded on copies of the *"Inspection and Maintenance Log"*.

1.7 AFTER A FALL: If the Anchorage Connector is subjected to the forces of arresting a fall, it must be removed from service immediately, clearly marked "DO NOT USE", and then destroyed.

2.0 SYSTEM REQUIREMENTS

2.1 ANCHORAGE: Anchorage structure requirements vary with the fall protection application. Structure on which the Anchorage Connector is placed or mounted must meet the Anchorage Strength specifications defined in Table 1.

2.2 PERSONAL FALL ARREST SYSTEM: Figure 1 illustrates the application of this Anchorage Connector. Personal Fall Arrest Systems (PFAS) used with the system must meet applicable Fall Protection standards, codes, and requirements. The PFAS must incorporate a Full Body Harness and limit Arresting Force to the following values:

	Maximum Arresting Force	Free Fall
PFAS with Shock Absorbing Lanyard	1,800 lb (8 kN)	*Refer to the instruction(s) included with your Lanyard or SRD for Free Fall limitations.*
PFAS with Self Retracting Device (SRD)	1,800 lb (8 kN)	

2.3 FALL PATH AND SRD LOCKING SPEED: A clear path is required to assure positive locking of an SRD. Situations which do not allow for an unobstructed fall path should be avoided. Working in confined or cramped spaces may not allow the body to reach sufficient speed to cause the SRD to lock if a fall occurs. Working on slowly shifting material, such as sand or grain, may not allow enough speed buildup to cause the SRD to lock.

2.4 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: heat, chemicals, corrosive environments, high voltage power lines, explosive or toxic gases, moving machinery, sharp edges, or overhead materials that may fall and contact the user or Personal Fall Arrest System.

2.5 FALL CLEARANCE: Figure 3 illustrates the components of a Fall Arrest. There must be sufficient Fall Clearance (FC) to arrest a fall before the user strikes the ground or other obstruction. Clearance is affected by a number of factors including: Anchorage Location, (A) Lanyard Length, (B) Lanyard Deceleration Distance or SRD Maximum Arrest Distance, (C) Harness Stretch and D-Ring/Connector Length and Settling. Refer to the instructions included with your Fall Arrest subsystem for specifics regarding Fall Clearance calculation.

---

1 ***Fall Arrest System:*** *A collection of Fall Protection Equipment configured to arrest a free fall.*
2 ***Fall Restraint System:*** *A collection of Fall Protection Equipment configured to prevent the person's center of gravity from reaching a fall hazard.*
3 ***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.*
4 ***Authorized Person:*** *A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard.*
5 ***Rescuer:*** *Person or persons other than the rescue subject acting to perform an assisted rescue by operation of a rescue system.*
6 ***Inspection Frequency:*** *Extreme working conditions (harsh environments, prolonged use, etc.) may require increasing the frequency of competent person inspections.*

2.6 SWING FALLS: Swing Falls occur when the anchorage point is not directly above the point where a fall occurs (see Figure 4). The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as directly below the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a Self-Retracting Device or other variable length connecting subsystem is used.

2.7 COMPONENT COMPATIBILITY: 3M equipment is designed for use with 3M approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect the safety and reliability of the complete system.

2.8 CONNECTOR COMPATIBILITY: Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Contact 3M if you have any questions about compatibility.

Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2 kN). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 5). Connectors must be compatible in size, shape, and strength. If the connecting element to which a snap hook or carabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner (A). This force may cause the gate to open (B), allowing the snap hook or carabiner to disengage from the connecting point (C).

Self-locking snap hooks and carabiners are required by ANSI Z359 and OSHA.

2.9 MAKING CONNECTIONS: Snap hooks and carabiners used with this equipment must be self-locking. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

3M connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 6 for examples of inappropriate connections. Do not connect snap hooks and carabiners:

A. To a D-ring to which another connector is attached.

B. 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 similar objects which will result in a load on the gate if the hook or D-ring twists or rotates, unless the snap hook complies is equipped with a 3,600 lb (16 kN) gate. Check the marking on your snap hook to verify that it is appropriate for your application.

C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.

D. To each other.

E. Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allows such a connection).

F. To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.

G. In a manner that does not allow the connector to align properly while under load.

3.0 INSTALLATION

☑ *Installation of the Protecta Swiveling Roof Anchor must be supervised by a Qualified Person[1]. The installation must be certified by a Competent Person[2] as meeting the criteria for a Certified Anchorage, or that it is capable of supporting the potential forces that could be encountered during a fall.*

3.1 PLANNING: Plan your fall protection system prior to installation of the Swiveling Roof Anchor. Account for all factors that may affect your safety before, during and after a fall. Consider all requirements, limitations and specifications defined in Section 2 and Table 1.

Roof Anchor Planning: The installation of where to place the Swiveling Roof Anchor requires careful planning and adherance to the specifications of Figure 8. Any time the lifeline passes over the peak or other obstacle, caution regarding wear is required.

- Placement should be 12 inches (.3 m) lower than the roof peak, if a sloped roof, and 6 feet (1.8 m) from any exposed roof edge.
- Do not install on any facia board, eaves, gables, or other unsupported structure.
- Multiple anchors should be installed at 8 feet (2.4 m) spacing along roof ridge.
- This anchor is not intended to be perminantly installed or designed to prevent roof leakage.

3.2 INSTALLING THE SWIVELING ROOF ANCHOR: The Swiveling Roof Anchor can be installed on roofs meeting the anchorage requirements specified in Table 1. See Figure 1 for the dimensions of width (B) and height (A). Figures 8-10 illustrate the installation of the Swiveling Roof Anchor on various roof types. The Swiveling Roof Anchor can be installed on wood roof framing, steel Z-Purlin, and steel decking types of roofs.

Wood Roof Framing Attachment: The placement of the anchor must be in framing members that are free of cracks, large knots, splits, or any other defects that would impair the strength of the wood. It must be installed after the roof sheathing is attached but never attached over existing shingles or other roofing materials. See Figure 9 for reference.

1. Position the anchor so that eight of the screw holes are centered over a framing member that is a minimum of 2 x 6 and maximum of 24 inches (.6 m) on center.
2. Install eight 1/4-14 x 2 1/2+ lag screws through holes centered on the framing member. Use only the lag screws that are included with the anchor. If it is suspected that splitting will occur, predrilling is required. This predrilling should be a 3/16 in. diameter hole that is 2-2 1/2 in. (5-6.4 cm) deep.

Steel Z-Purlin Attachment: The placement of the anchor must be in Z-purlins a minimum of 16 gauge (.064 in.)(.16 cm) or thicker metal that is in good condition and free of any defects that would impair the strength of the metal. It must be installed after the roof decking is secured to the Z-purlins. See Figure 10 for reference.

1. Place the required wood spacers (provided by the user) into the troughs of the metal decking material so the spacers fill the trough shape and provide an even surface to attach the anchor.
2. Position the anchor on the roof decking so that eight of the screw holes in the anchor line up with the center of the top flange of the Z-purlin. Install eight 1/4-14 self-drilling screws through the holes centered on the Z-purlin flange.
3. All of the self-drilling screws must engage the center of the purlin top flange, and long enough to have a minimum of five threads protruding through the purlin flange.

Steel Decking Attachment: The placement of the anchor must be in decking a minimum of 22 gauge (.030 inch)(.08 cm) or thicker metal that is in good condition and free of any defects that would impair the strength of the metal. It must not span more than 6 ft. (1.83 m) between supports and must not be used until the decking is in place and fully secured. See Figure 11 for reference.

1. Place the required wood spacers (provided by the user) into the troughs of the metal decking material so the spacers fill the troughs and provide an even surface to attach the anchor.
2. Position the anchor on the roof decking so that eight of the screw holes in the anchor line up with the center of the decking rib. Install sixteen 1/4-14 x 2 1/2 inch self-drilling screws, eight in each direction.
3. All of the self-drilling screws must engage the decking and be long enough to have a minimum of five threads protruding through the decking material.
4. All sixteen holes in the base plate must be used for mounting the anchor to the steel decking.

3.3 INSTALLING THE SRL-LE: Figure 8 illustrates mounting of Rebel Leading Edge Self-Retracting Lifelines in the Swiveling Roof Anchor. To install the SRL-LE in the Swivel Bracket of the Swiveling Roof Anchor:

1. Route the SRL-LE lifeline underneath the welded Cross Bar on the front of the Swivel Bracket. The SRL-LE lifeline must pass underneath this Cross Bar.
2. Position the SRL-LE in the Swivel Bracket with the Swivel Eye on the SRL-LE aligned with the appropriate Mounting Holes in the back end of the Swivel Bracket. Insert the provided SRL Mounting Hardware through the Swivel Bracket and Swivel Eye.

---

1 Qualified Person: *An individual with a recognized degree or professional certificate, and extensive experience in Fall Protection. This individual must be capable of design, analysis, evaluation, and specification in Fall Protection.*

2 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.*

4.0 USE

4.1 **BEFORE EACH USE:** Verify that your work area and Personal Fall Arrest System (PFAS) meet all criteria defined in Section 2 and a formal Rescue Plan is in place. Inspect the Swiveling Roof Anchor per the '*User*' inspection points defined on the "*Inspection and Maintenance Log*" (Table 2). 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.

4.2 **FALL ARREST CONNECTIONS:** The Swiveling Roof Anchor is used with a Full Body Harness and Leading Edge Self-Retracting Lifeline (SRL-LE). Connect the SRL-LE Lifeline to the back Dorsal D-Ring on the Harness as instructed in the instructions included with the SRL-LE.

5.0 INSPECTION

5.1 **INSPECTION FREQUENCY:** The Swiveling Roof Anchor must be inspected at the intervals defined in Section 1. Inspection procedures are described in the *"Inspection and Maintenance Log" (Table 2)*. Inspect all other components of the Fall Protection System per the frequencies and procedures defined in the manufacturer's instructions.

5.2 **DEFECTS:** If inspection reveals an unsafe or defective condition, remove the Swiveling Roof Anchor from service immediately and contact 3M regarding replacement. Do not attempt to repair the Fall Arrest System.

5.3 **PRODUCT LIFE:** The functional life of the Fall Arrest System is determined by work conditions and maintenance. As long as the product passes inspection criteria, it may remain in service.

6.0 MAINTENANCE, SERVICING, STORAGE

6.1 **CLEANING:** Periodically clean the Swiveling Roof Anchor metal components with a soft brush, warm water, and a mild soap solution. Ensure parts are thoroughly rinsed with clean water.

6.2 **SERVICE:** If inspection reveals an unsafe or defective condition, remove the Swiveling Roof Anchor from service immediately and contact 3M regarding replacement. Do not attempt to repair the Fall Arrest System.

6.3 **STORAGE AND TRANSPORT:** When not in use, store and transport the Swiveling Roof Anchor 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.

7.0 LABELS

Figure 12 illustrates labels on the Swiveling Roof Anchor. Labels must be replaced if they are not fully legible.

Table 2 – Inspection and Maintenance Log			
Inspection Date:	**Inspected By:**		
Components:	**Inspection:** (See Section 1 for *Inspection Frequency*)	**User**	**Competent Person**[1]
Swivel Roof Anchor (Figure 2)	Inspect the Swivel Roof Anchor for damage: Look for cracks, dents, corrosion or deformities. Look for bending or wear on the Anchor Base Plate (D), Swivel Bracket (A), and the SRL Mounting Hardware (C).	☐	☐
	Confirm all hardware and any wood spacers required for the Anchor Base Plate are present and in safe working order.	☐	☐
	Confirm the SRL Mounting Hardware can be inserted through the holes in the Swivel Bracket and SRL-LE Swivel Eye.	☐	☐
	Confirm that the Swivel Bracket swivels 360 degrees.	☐	☐
Labels (Figure 12)	Verify that all labels are securely attached and are legible (see *'Labels'*)	☐	☐
PFAS and Other Equipment	Additional Personal Fall Arrest System (PFAS) equipment (harness, SRL, etc) that are used with the anchorage system should be installed and inspected per the manufacturer's instructions.	☐	☐

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

Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:
Corrective Action/Maintenance:	Approved By:
	Date:

1 ***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.*

U.S. PRODUCT WARRANTY, LIMITED REMEDY AND LIMITATION OF LIABILITY

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 applicable law, 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 at 800-328-6146 or via email at 3MFallProtection@mmm.com for assistance.

LIMITATION OF LIABILITY: TO THE EXTENT PERMITTED BY APPLICABLE LAW, 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.

3M | DBI SALA® PROTECTA®

Fall Protection

USA
3833 SALA Way
Red Wing, MN 55066-5005
Toll Free: 800.328.6146
Phone: 651.388.8282
Fax: 651.388.5065
3Mfallprotection@mmm.com

Brazil
Rua Anne Frank, 2621
Boqueirão Curitiba PR
81650-020
Brazil
Phone: 0800-942-2300
falecoma3m@mmm.com

Mexico
Calle Norte 35, 895-E
Col. Industrial Vallejo
C.P. 02300 Azcapotzalco
Mexico D.F.
Phone: (55) 57194820
3msaludocupacional@mmm.com

Colombia
Compañía Latinoamericana de Seguridad S.A.S.
Carrera 106 #15-25 Interior 105 Manzana 15
Zona Franca - Bogotá, Colombia
Phone: 57 1 6014777
fallprotection-co@mmm.com

Canada
260 Export Boulevard
Mississauga, ON L5S 1Y9
Phone: 905.795.9333
Toll-Free: 800.387.7484
Fax: 888.387.7484
3Mfallprotection-ca@mmm.com

EMEA (Europe, Middle East, Africa)
EMEA Headquarters:
5a Merse Road
North Moons Moat
Redditch, Worcestershire
B98 9HL UK
Phone: + 44 (0)1527 548 000
Fax: + 44 (0)1527 591 000
informationfallprotection@mmm.com

France:
Le Broc Center
Z.I. 1re Avenue - BP15
06511 Carros Le Broc Cedex
France
Phone: + 33 04 97 10 00 10
Fax: + 33 04 93 08 79 70
informationfallprotection@mmm.com

Australia & New Zealand
95 Derby Street
Silverwater
Sydney NSW 2128
Australia
Phone: +(61) 2 8753 7600
Toll-Free : 1800 245 002 (AUS)
Toll-Free : 0800 212 505 (NZ)
Fax: +(61) 2 8753 7603
anzfallprotectionsales@mmm.com

Asia
Singapore:
1 Yishun Avenue 7
Singapore 768923
Phone: +65-6450 8888
Fax: +65-6552 2113
TotalFallProtection@mmm.com

Shanghai:
19/F, L'Avenue, No.99 Xian Xia Rd
Shanghai 200051, P R China
Phone: +86 21 62539050
Fax: +86 21 62539060
3MFallProtecton-CN@mmm.com

Korea:
3M Koread Ltd
20F, 82, Uisadang-daero,
Yeongdeungpo-gu, Seoul
Phone: +82-80-033-4114
Fax: +82-2-3771-4271
TotalFallProtection@mmm.com

Japan:
3M Japan Ltd
6-7-29, Kitashinagawa, Shinagawa-ku, Tokyo
Phone: +81-570-011-321
Fax: +81-3-6409-5818
psd.jp@mmm.com

3M.com/FallProtection

ISO 9001 | bsi. ISO 9001 Quality Management FM534873