



**Instructions for the
following series products:**

Sliding Beam Anchors

***(See back page for specific
model numbers.)***

**User Instruction Manual
Glyder™ Sliding Beam Anchor**

*This manual is intended to meet the Manufacturer's Instructions
as required by ANSI Z359.1 and should be used as part of an
employee training program as required by OSHA*



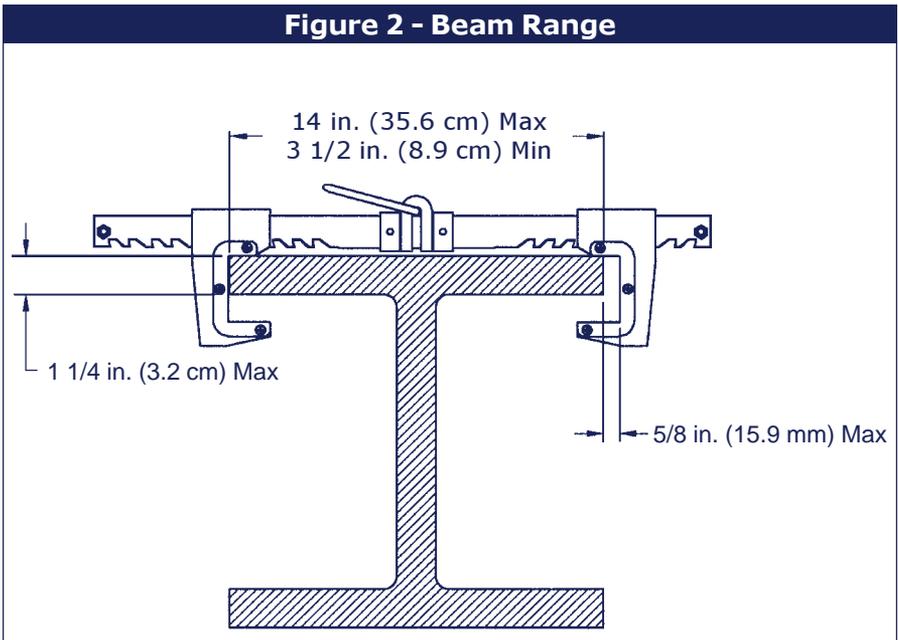
WARNING: This product is part of a personal fall protection system. The user must read and follow the manufacturer's instructions for each component or part of the complete system. These instructions must be provided to the user of this equipment. The user must read and understand these instructions or have them explained to them before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this product. Alterations or misuse of this product or failure to follow instructions may result in serious injury or death.

IMPORTANT: If you have questions on the use, care, or suitability of this equipment for your application, contact DBI-SALA.

IMPORTANT: Record the product identification information from the ID label in the inspection and maintenance log in section 9.0 of this manual.

1.0 APPLICATIONS

1.1 PURPOSE: The sliding beam anchor is an anchorage connector designed to move along horizontal beams with an attached personal fall arrest system (energy absorbing lanyard and full body harness) which limits the maximum arresting forces to 1,800 lbs. (8 kN) The sliding beam anchor is for use as a component of a personal fall arrest system (PFAS). Do not hang, lift, or support tools, equipment, or materials from the sliding beam anchor. Do not use a sliding beam anchor as a lifting point when moving structural members.



1.2 LIMITATIONS: Consider the following application limitations before using this equipment:

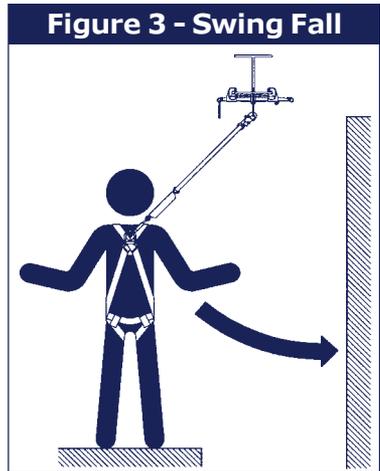
- A. BEAMS:** The sliding beam anchor must only be installed on beams with flanges within the adjustment range for the model being used.

The sliding beam anchor must only be installed on beams with flange widths between 3 1/2 in. (8.9 cm) and 14 in. (35.6 cm), and flange thicknesses up to 1 1/4 in. (3.2 cm). See Figure 2.

The beam must meet the anchorage strength requirements specified in section 2.5. The sliding beam anchor must only be used on beams where a fall will not cause the sliding beam anchor to slide along the beam and thereby increase the fall distance. Beams which are inclined or sloped greater than 15 degrees from horizontal may cause the sliding beam anchor to slide on the beam during a fall. On sloped or vertical beams, the sliding beam anchor must be positioned next to an obstruction or stop which will prevent movement of the sliding beam anchor in the event of a fall. Beams in all orientations must have stops at each end of the beam to prevent the sliding beam anchor from coming off the beam. Stops used to prevent movement of the sliding beam anchor in the event of a fall must meet the strength requirements specified in section 2.5.

- B. BEAM JOINTS:** When passing from one beam to an adjacent beam, ensure the sliding beam anchor remains secure. The maximum gap between adjacent beams must be limited to 1/2 in. (16 mm)
- C. CAPACITY:** The sliding beam anchors are for use by persons with a combined weight (person, clothing, tools, etc.) of no more than 420 lbs. (191 kg). No more than one user may be connected to the sliding beam anchor at one time.
- D. PERSONAL FALL ARREST SYSTEM:** PFAS's selected for use with the sliding beam anchor must meet the system performance and other specifications stated in section 2.1.
- E. FREE FALL:** PFAS's used with the sliding beam anchor must be rigged to limit the free fall to 6 ft (1.8 m) or less when possible, as required by OSHA. The maximum free fall must always be within the manufacturer's stated free fall capacity of the PFAS's system components used to arrest the fall. See section 2.1 and connecting subsystem manufacturer's instructions for more information.

F. SWING FALLS: See Figure 3. Swing falls occur when the anchorage point is not directly above or below the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury. Minimize swing falls by working as close to the anchorage point as possible. Do not permit a swing fall if injury could occur.



G. FALL CLEARANCE: There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or other obstruction. The clearance required is dependent on the following factors:

- Elevation of Beam Anchor
- Connecting subsystem length
- Deceleration distance
- Movement of harness attachment element
- Worker height
- Free fall distance

See personal fall arrest system manufacturer's instructions for more information.

H. 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; heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges. Contact DBI-SALA if you have questions about using this equipment where environmental hazards exist.

I. TRAINING: This equipment is intended to be used by persons trained in its correct application and use.

1.3 APPLICABLE STANDARDS: Refer to national standards, including ANSI Z359.1 and local, state, and federal (OSHA) requirements for more information on personal fall arrest systems and associated components.

2.0 SYSTEM REQUIREMENTS

2.1 PFAS COMPONENTS: PFAS's used with the sliding beam anchor must meet applicable OSHA, state, federal, and ANSI requirements. A full body harness must be worn by the worker when connected to the sliding beam anchor. As required by OSHA, the PFAS must be capable of arresting a workers fall with a maximum arresting force no greater than 1,800 lbs. (8kN), and where possible, limit the free fall distance to 6 ft (1.8 m). If the maximum free fall distance of 6 ft (1.8m) must be exceeded, the employer must document, based on test data, that the maximum permissible arresting forces will not be exceeded, and that the personal fall arrest system will function properly. When a free fall greater than 6 ft (1.8 m), up to a maximum of 12 ft (3.7 m), is possible, DBI-SALA recommends using a PFAS incorporating a DBI-SALA Force2 energy absorbing lanyard. DBI-SALA has performed testing using the Force2 energy absorbing lanyard in free falls up to twelve feet to ensure the maximum arresting force does not exceed 1,800 lbs. (8kN), and the system functions properly. The results of these tests are listed in the user instruction manual provided with the Force2 shock absorbing lanyards.

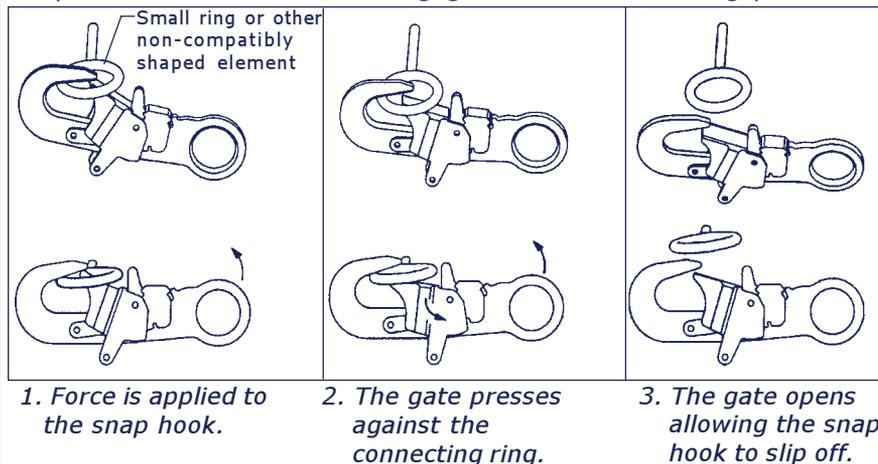
2.2 COMPATIBILITY OF COMPONENTS: DBI-SALA equipment is designed for use with DBI-SALA approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may effect the safety and reliability of the complete system.

2.3 COMPATIBILITY OF CONNECTORS: 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 DBI-SALA if you have any questions about compatibility.

Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2kN). 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 4. Connectors must be compatible in size, shape, and strength. Self locking snap hooks and carabiners are required by ANSI Z359.1 and OSHA.

Figure 4 - Unintentional Disengagement (Roll-out)

If the connecting element that a snap hook (shown) or carabiner attaches to 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. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



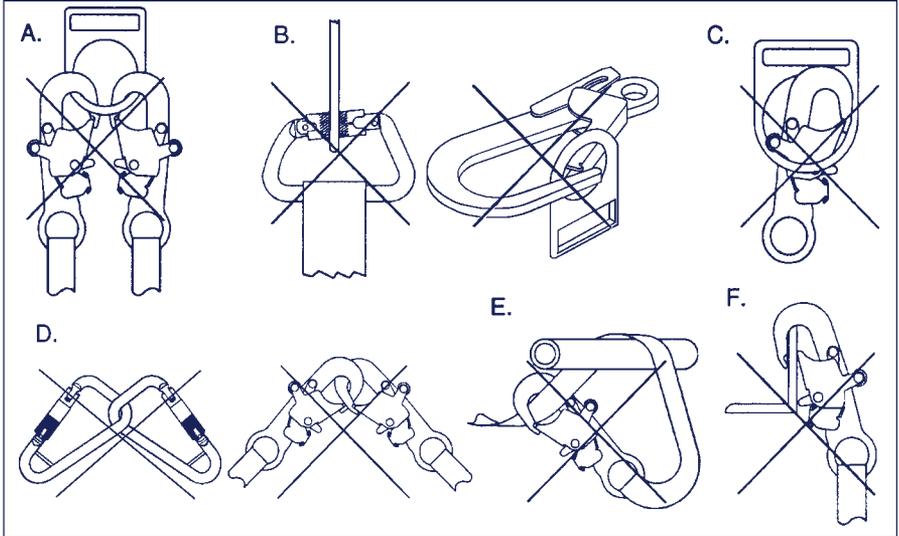
2.4 Making Connections: Only use self-locking snap hooks and carabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked. DBI-SALA connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 5 for inappropriate connections. DBI-SALA snap hooks and carabiners should not be connected:

- A. To a D-ring to which another connector is attached.
- B. In a manner that would result in a load on the gate.

NOTE: Large throat opening 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. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.

- 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.

Figure 5 - Inappropriate Connections



- E.** Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow 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.

2.5 ANCHORAGE STRENGTH: Sliding beam anchors installed for fall arrest applications must be attached to a beam structure capable of sustaining static loads in the directions permitted by the PFAS of at least: 3,600 lbs (16 kN). with certification of a qualified person, or 5,000 lbs (22.2 kN). without certification. See ANSI Z359.1 for certification definition. When more than one sliding beam anchor is attached to the same beam, all points of the beam must be capable of supporting the strengths stated above for each sliding beam anchor on that beam.

From OSHA 1926.500 and 1910.66: Anchorages used for attachment of a PFAS shall be independent of any anchorage being used to support or suspend platforms, and must support at least 5,000 lbs (22.2 kN). per user attached, or be designed, installed, and used as part of a complete PFAS which maintains a safety factor of at least two, and is supervised by a qualified person.

3.0 INSTALLATION AND OPERATION

WARNING: Do not alter or intentionally misuse this equipment. Consult DBI/SALA when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, and sharp edges.

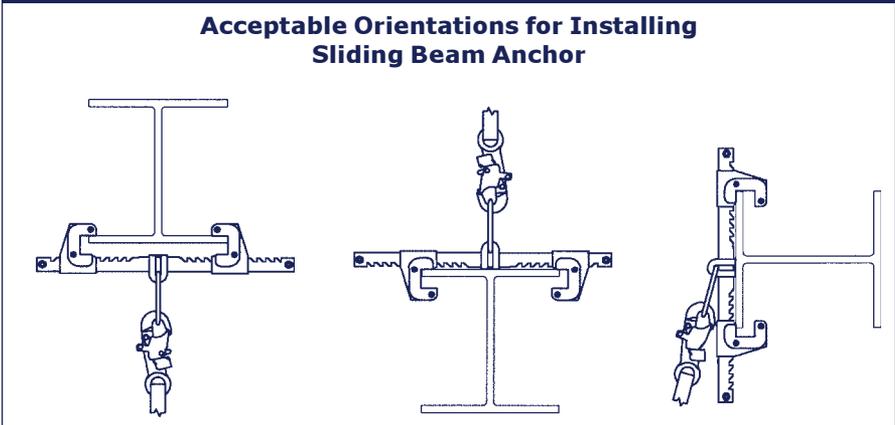
WARNING: Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use DBI-SALA anchorage connectors.

3.1 BEFORE EACH USE of this equipment, carefully inspect it according to section 5.0 of this manual.

3.2 INSTALLATION: The sliding beam anchor can be installed on any beam flange meeting the requirements specified in section 1.2. The flange may be located on the top, bottom, or side of a beam as required. See Figure 6.

Figure 6 - Installation

**Acceptable Orientations for Installing
Sliding Beam Anchor**



Step 1. Press inward on the release tabs on the outside of the end hooks. This will allow the end hooks to slide back and forth along the support bar. Slide the hook ends outward until there is enough space between the hook ends that they will fit over the width of the beam flanges.

Step 2. Position the sliding beam anchor over the beam so both hook ends extend over the beam flange. Center the D-ring over the middle of the beam flange.

Step 3. Press the release tabs inward so the hook ends can be moved toward the D-Ring centered over the beam until a minimum amount of clearance exists on either side of the flange. The total clearance must never be greater than 5/8 in. (15.9 mm). See Figure 2. Ensure the release tabs have returned to the locked position and that the locking pawls are fully engaged with the bar teeth.

Step 4. Inspect your installation to confirm that the sliding beam anchor cannot come off the beam at any point along the intended path of movement or at beam joints or ends.

3.3 OPERATION:

- A. PERSONAL FALL ARREST SYSTEM:** Inspect and don your harness according to the instructions provided with the harness. Attach the connecting subsystem (energy absorbing lanyard) to the dorsal D-ring on the harness.
- B. STRUCTURE:** Ensure the structure you will be connecting to is properly supported before securing the connecting subsystem to the sliding beam anchor. Approach the structure using appropriate access equipment.
- C. OTHER CONSIDERATIONS:** When working on a structure, do not take unnecessary risks, such as jumping or reaching too far from the edge of the structure. Use caution when moving along the beam. Paint buildup, weld spatter, scale, fasteners, or other obstructions on the beam could affect the sliding beam anchor's ability to move freely along the beam. An obstruction could cause the anchor to stop abruptly, causing loss of balance. Be aware of hazards in your work area. Do not allow the connecting subsystem to pass under your arms or between your feet. Do not climb above the sliding beam anchor or off to the side. See section 1.2.
- D. ANCHORAGE BEAM:** Select a beam which is capable of supporting the required loads. See sections 1.2 and 2.5. If the beam is sloped or vertical, the sliding beam clamp must be positioned next to a stop which will prevent the sliding beam clamp from moving in the event of a fall. Joints between beam sections must be flush, with a maximum gap of 1/2 inch. End stops must be present at both ends of the beam.
- E. FREE FALL:** PFAS's must be rigged to limit free fall to a maximum of six feet where possible, in accordance with OSHA requirements. When free falls greater than six feet are possible, the PFAS's must be designed for such use. See sections 1.2. and 2.1. Make sure your connection to the sliding beam anchor is compatible, see sections 2.2 – 2.4.

- F. SHARP EDGES:** Avoid working where the connecting subsystem (energy absorbing lanyard) or other system components will be in contact with, or abrade against, unprotected sharp edges. If working around sharp edges is unavoidable, protection must be provided with a suitable protective cover.
- G. AFTER A FALL:** Components which have been subjected to fall arrest forces must be removed from service and destroyed.
- H. RESCUE:** The employer must have a rescue plan and the ability to implement it.

4.0 TRAINING

- 4.1** It is the responsibility of the user to assure they are familiar with these instructions, and are trained in the correct care and use of this equipment. The user must also be aware of the operating characteristics, application limits, and the consequences of improper use of this equipment.

IMPORTANT: *Training must be conducted without exposing the user to a fall hazard. Training should be repeated on a periodic basis.*

5.0 INSPECTION

5.1 FREQUENCY:

- **Before Each Use** inspect the sliding beam anchor according to sections 5.2 and 5.3.
- **Formal Inspection:** A formal inspection of the sliding beam anchor must be performed at least annually by a competent person other than the user. The frequency of formal inspections should be based on conditions of use or exposure. See sections 5.2 and 5.3. Record the inspection results in the inspection and maintenance log in section 9.0.

IMPORTANT: *If this equipment has been subjected to fall arrest forces remove from service and destroy.*

IMPORTANT: *Extreme working conditions (harsh environments, prolonged use, etc.) may require increasing the frequency of inspections.*

5.2 INSPECTION STEPS:

- Step 1.** Inspect the sliding beam anchor for damage. Look carefully for cracks, dents, or deformities in the metal. Check for bending or wear on the support bar and hook ends. Ensure no parts are missing (fasteners, labels, etc.).

- Step 2.** Inspect the sliding beam clamp for excessive corrosion.
- Step 3.** Inspect the wear pads to ensure they have not worn to a point where the hook ends will be in direct contact with the beam flange. Replace the wear pads according to section 6.2 as required.
- Step 4.** Ensure the release tabs/locking pawls move freely and springs automatically into engagement with the bar teeth.
- Step 5.** Inspect the support bar teeth for wear or damage. Ensure that the locking pawl will fully engage each tooth automatically upon release of the release tab.
- Step 6.** Inspect all labels. Product information labels must be present and fully legible. See section 8.0. Product information labels must be replaced if missing or illegible.
- Step 7.** Record the inspection results for all formal inspections in the inspection and maintenance log. See section 9.0.

- 5.3** If the inspection reveals an unsafe or defective condition, remove the unit from service and destroy, or contact a factory authorized service repair center. Defective or worn wear pads may be replaced by the end user according to section 6.2.

NOTE: Only DBI-SALA or parties authorized in writing may make repairs to this equipment.

6.0 MAINTENANCE, SERVICING, STORAGE

- 6.1 CLEANING:** Periodically clean the sliding beam anchor using water and a mild soap solution. Do not use acids or other caustic chemicals that could damage the system components. A lubricant such as WD40® can be applied to the release tab/locking pawl.
- 6.2 REPLACING WEAR PADS:** When the wear pads are worn to a point where the hook ends will be in direct contact with the beam flange, they must be replaced. Replace the wear pads by removing the screws and lock nuts securing them in place. Discard the old wear pads along with the old screws and lock nuts. Install the replacement parts as shown in Figure 1.
- 6.3 USER EQUIPMENT:** Maintain, service, and store harnesses and PFAS components in accordance with separate instructions provide with each component.

7.0 SPECIFICATIONS

7.1 MATERIALS OF CONSTRUCTION:

Support Tube: Aluminum Alloy.

Hook Ends: Alloy steel, plated.

Wear Pads: UHMW polyethylene, U.V. stabilized.

D-ring: Forged alloy steel, plated.

D-ring Bracket: Stainless steel.

Bolts: High strength alloy steel, up to Grade 8, plated.

Other Fasteners: Plated and stainless

7.2 DIMENSIONS

Size: 3.0 in. x 4.3 in. x 19.3 in. (7.6 cm x 10.9 cm x 49.0 cm)

Beam Flange Size Application Range:

3-1/2 in. – 14 in. (8.9 cm – 35.6 cm) wide, up to 1-1/4 in. (3.2 cm) thick.

Weight: 4 lbs. (1.8 kg)

7.3 PERFORMANCE

Minimum Breaking Strength: 5,000 lbs. (22.2kN)

Capacity: 420 lbs. (190.5 kg) (one person)

9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER: _____

MODEL NUMBER: _____

DATE PURCHASED: _____

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			

WARRANTY

Equipment offered by DBI-SALA is warranted against factory defects in workmanship and materials for a period of two years from date of installation or use by the owner, provided that this period shall not exceed two years from date of shipment. Upon notice in writing, DBI-SALA will promptly repair or replace all defective items. DBI-SALA reserves the right to elect to have any defective item returned to its plant for inspection before making a repair or replacement. This warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of DBI-SALA. This warranty applies only to the original purchaser and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.

This instruction applies to the following models:

2104700

Additional model numbers may appear on the next printing of these instructions



A Capital Safety Company

USA

3833 SALA Way
Red Wing, MN 55066-5005
Toll Free: 800-328-6146
Phone: (651) 388-8282
Fax: (651) 388-5065
www.capitalsafety.com

Canada

260 Export Boulevard
Mississauga, Ontario L5S 1Y9
Toll Free: 800-387-7484
Phone: (905) 795-9333
Fax: (905) 795-8777
www.capitalsafety.com

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Certificate No. FM 39709

Form: 5902309
Rev: A