INSTRUCTION MANUAL

ANSI Z359.1

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.

Figure 1 – 8510132 8516191 8518348 8518504
1. **SPECIFICATIONS**

![Illustration of a Side Mount Base]

**DESCRIPTION:**
The DBI-SALA Side Mount Bases are designed for mounting to horizontal concrete or steel structures.

**IMPORTANT:**
All connecting systems, (self retracting lifelines, winches and energy absorbing lanyards) used with the davit arm and base system shall limit the arresting forces to 900 lbs (4 kN).

**GENERAL SPECIFICATIONS - MODEL 8516191:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity (working load)</td>
<td>450 lbs (205 kgs)</td>
</tr>
<tr>
<td>Vertical Load</td>
<td>5,000 lbf (22.2 kN)</td>
</tr>
</tbody>
</table>

**MATERIALS & CONSTRUCTION:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Construction</td>
<td>Welded Steel</td>
</tr>
<tr>
<td>Material</td>
<td>Mild Steel</td>
</tr>
<tr>
<td>Hardware (Minimum)</td>
<td>Gr. 8 Steel, Zinc Plated</td>
</tr>
<tr>
<td>Finish (Steel)</td>
<td>Zinc Plated</td>
</tr>
<tr>
<td>Plating Specification</td>
<td>ASTM Designation B633, Type II, Class 1</td>
</tr>
</tbody>
</table>

**APPLICATION RESTRICTIONS:**

For use with Capital Safety Systems products & accessories only.

Each installation must be approved to local standards by a qualified engineer.

If base material does not meet the minimum requirements, reinforcement must be added to meet the minimum requirements.

**GENERAL SPECIFICATIONS - MODEL 8518348**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity (working load)</td>
<td>450 lbs (205 kgs)</td>
</tr>
<tr>
<td>Vertical Load</td>
<td>5,000 lbf (22.2 kN)</td>
</tr>
</tbody>
</table>

**MATERIALS & CONSTRUCTION:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Construction</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Material</td>
<td>304 SS</td>
</tr>
<tr>
<td>Hardware (Minimum)</td>
<td>Gr. 8 Steel, Zinc Plated and Stainless Steel</td>
</tr>
<tr>
<td>Finish (Stainless Steel)</td>
<td>Brush Blast</td>
</tr>
<tr>
<td>Plating Specification</td>
<td>None</td>
</tr>
</tbody>
</table>

**APPLICATION RESTRICTIONS:**

For use with Capital Safety Systems products & accessories only.

Each installation must be approved to local standards by a qualified engineer.

If base material does not meet the minimum requirements, reinforcement must be added to meet the minimum requirements.
**GENERAL SPECIFICATIONS - MODEL 8518504:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity (working load)</td>
<td>450 lbs (205 kgs)</td>
</tr>
<tr>
<td>Vertical Load</td>
<td>5,000 lbf (22.2 kN)</td>
</tr>
</tbody>
</table>

**APPLICATION RESTRICTIONS:**

For use with Capital Safety Systems products & accessories only.

**MATERIALS & CONSTRUCTION:**

General Construction: Welded Steel

Material: Mild Steel

Hardware (Minimum): Gr. 8 Steel, Zinc Plated

Finish: Galvanized

Plating Specification: ASTM A123/A123M

Each installation must be approved to local standards by a qualified engineer.

If base material does not meet the minimum requirements, reinforcement must be added to meet the minimum requirements.

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**GENERAL SPECIFICATIONS - MODEL 8510132:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity (working load)</td>
<td>450 lbs (205 kgs)</td>
</tr>
<tr>
<td>Vertical Load</td>
<td>5,000 lbf (22.2 kN)</td>
</tr>
</tbody>
</table>

**APPLICATION RESTRICTIONS:**

For use with Capital Safety Systems products & accessories only.

**MATERIALS & CONSTRUCTION:**

General Construction: Welded Steel

Material: Mild Steel

Hardware (Minimum): Gr. 8 Steel, Zinc Plated

Finish: Zinc Plated

Plating Specification: ASTM Designation B633, Type II, Class 1

Each installation must be approved to local standards by a qualified engineer.

If base material does not meet the minimum requirements, reinforcement must be added to meet the minimum requirements.

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**NOTE:** Model 8510132 Davit Base has a removable liner.
Figure 2 – Base Dimensions

**WARNING:** The installers shall ensure the suitability of base materials into which structural anchor devices are fixed with every fixation.

Where an anchor device is intended to be used exclusively for personal protective equipment, it should be clearly marked by pictogram, or other clearly seen and understood marking, on or near the anchor device, clearly stating that the devise is designed exclusively for use of personal protective equipment. Anchor devices are only to be used with ANSI marked fall arrest systems, which will generate forces not to exceed 6 kN at the anchor device.

Due care should be taken to assess the suitability of all transportable temporary anchor devices and any associated fixings for the application in which it is to be used. The viability of any installation should be verifiable by a qualified engineer.

**IMPORTANT:** This base is not designed for welding application, and should be bolted in place. For bases designed to be welded in place, please contact Capital Safety.
## 2. MOUNTING REQUIREMENT MINIMUMS

### Table 1 – Mounting Requirement Minimums

<table>
<thead>
<tr>
<th></th>
<th>29 inches (73.6cm) Offset</th>
<th>48 inches (122cm) Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pullout Force Per Fastener</td>
<td>5,373 lbs (23.9 kN)</td>
<td>5,175 lbs (23 kN)</td>
</tr>
<tr>
<td>Shear Force Per Fastener</td>
<td>3,892 lbs (17.3 kN)</td>
<td>4,200 lbs (18.7 kN)</td>
</tr>
<tr>
<td>Moment Load Per Structure</td>
<td>90,000 in<em>lbs (10.2 kN</em>m)</td>
<td>86,400 in<em>lbs (9.8 kN</em>m)</td>
</tr>
<tr>
<td>Vertical Load Per Structure</td>
<td>5,000 lbs (22.3 kN) *</td>
<td>1,800 lbs (8 kN) *</td>
</tr>
</tbody>
</table>

*NOTE:* Meets OSHA requirements for engineered anchor points.

**NOTE:** These numbers are based on a safety factor of 2:1. Refer to the fastener manufacturer specifications for fastener safety factors. Capital Safety recommends maintaining at least a safety factor of 2:1. Multiple safety factors must be taken into account when determining fasteners.

**IMPORTANT:** Base installation must be approved to local regulations by a qualified engineer. Refer to the fastener manufacturer for location of the fasteners, structure thickness, and structure type requirements.

**WARNING:** Failure to follow Mounting Requirement Minimums and Installation instructions may lead to severe injury and/or death.
3. INSTALL

**WARNING:** It is imperative that the base be installed perpendicular to the ground. Severe injury and/or death may result if the base is installed incorrectly. If there are any questions pertaining to the installation or the base in general, contact Capital Safety.

**IMPORTANT:** All mounting hardware must be able to withstand a minimum pull out force of 5,175 lbs (23 kN) each if using a 122cm (48 inches) offset. If a 73.6cm (29 inches) offset is used, a minimum pullout 5,373 lbs (23.9 kN) is required. See Table 1 for specific installation guidelines. (2:1 safety factor.)

1. Place davit base upright and perpendicular to the ground. (See Figure 3 below.) Using a Specification approved drill bit and the davit base as a guide, drill four holes into the structure.
2. Install the Specification approved hardware.
3. A qualified engineer must verify the structural installation meets local and federal regulations.
4. A qualified engineer must recommend the appropriate fasteners and determine proper base placement on the mount structure.

![Figure 3 – Install Method](image-url)
4. **DAVIT BASE INSPECTION:**

**BEFORE EACH USE:**

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

**WARNING:** If the base has been subjected to fall arrest forces, it must be immediately removed from service and inspected. If the floor mount base fails inspection, remove from service and destroy, or contact Capital Safety for repair or replacement.

### Table 2 – Inspection and Maintenance Log

<table>
<thead>
<tr>
<th>Component</th>
<th>Inspection:</th>
<th>Authorized Person or Rescuer</th>
<th>Competent Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davit Base</td>
<td>Ensure all bolts are secure and not damaged.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Base should be inspected directly after installation and at same intervals as</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the arresting system for similar defects and/or unsafe conditions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All labels must be present and fully legible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If inspection reveals an unsafe or defective condition, remove the base from</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>service and destroy, or contact Capital Safety for repair or replacement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Look for signs of corrosion on the entire unit.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corrective Action/Maintenance:</th>
<th>Approved By:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective Action/Maintenance:</td>
<td>Approved By:</td>
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</tr>
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</table>

5. **DAVIT BASE LABELS**
LIMITED LIFETIME WARRANTY

Warranty to End User: D B Industries, LLC dba CAPITAL SAFETY USA ("CAPITAL SAFETY") warrants to the original end user ("End User") that its products are free from defects in materials and workmanship under normal use and service. This warranty extends for the lifetime of the product from the date the product is purchased by the End User, in new and unused condition, from a CAPITAL SAFETY authorized distributor. CAPITAL SAFETY'S entire liability to End User and End User's exclusive remedy under this warranty is limited to the repair or replacement in kind of any defective product within its lifetime (as CAPITAL SAFETY in its sole discretion determines and deems appropriate). No oral or written information or advice given by CAPITAL SAFETY, its distributors, directors, officers, agents or employees shall create any different or additional warranties or in any way increase the scope of this warranty. CAPITAL SAFETY will not accept liability for defects that are the result of product abuse, misuse, alteration or modification, or for defects that are due to a failure to install, maintain, or use the product in accordance with the manufacturer's instructions.

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