Material Specifications
Shackle: 3/16 x 4-1/2 x 2.0”
Backer Plate: 1/16”
No. 1029: Q235 Steel
D-Ring: SAS No. 5003 Stainless Steel
Coating: Hot Dipped Galvanized
No. 1029-S: 430 Stainless Steel
D-Ring: SAS No. 5003-S 304sst
Bolt Holes: 2ea 9/16”d.
Min. Tensile Strength: 5,000lb(22.5kN)
Compliance: OSHA1926:502 ANSI Z359.1-07

Specified Use
Fall Arrest, Work Positioning or Horizontal Line Systems.
User Specifications: 1 person max. user wt. 310lb(140kg), including tools and equipment. Free Fall: Max. length 6ft(1.8m). Max Arrest force: 1800lb(8kN).
Fall Restraint Definition OSHA 1926.751
“A means of fall protection that prevents the user from falling any distance.”

Non-Specified Use
Do not use for window washing, suspended work, scaffold tie-off or material lifting.

Fastener/Anchor Inspection Prior to Use
Make the following primary inspections prior to each use. See pg. 2 for additional inspection points.
- Attachment bolts/lock nuts in place (Figs. 1-3).
- Field welded as shown at Fig.2

PPE Requirement
A full body harness and personal energy absorber are required for use with this anchor. All PPE including SRL’s (self-retracting lifelines) must comply with current ANSI, CSA or OSHA fall protection standards. Connectors: Use only class 1 snaphooks, carabiners or rebar hooks with 3,600lb gate strengths that are rated for fall protection use and compatible with the anchor D-ring.

Anchor Attachment Point
Fall Arrest: The structure to which the anchor is attached must be capable of supporting 5,000lb(22.5kN) or 2x the engineered fall protection load.
Fall Restraint: No free fall hazard exposure. The anchorage point must be capable of supporting 3,000lb(13.6kN) or 2x the engineered fall protection load.

Attachment Bolts
The user/installer is required to supply adequate length 1/2” d. grade 8, 18-8sst or A-307 all thread rods with equal strength lock nuts. Tighten nuts securely to prevent anchor movement. Flat washers may be used on the underside of the bolt penetration. WARNING! Do not use lag bolts, nails or screws.

Steel Structures
Bolt Attached: Shown at Fig.1, position or clamp anchor in place and mark bolt hole locations. Drill 1/2” or 9/16” bolt holes.
Field Welded: Shown at Fig.2, weld the shackle perimeter on all sides. Welding to be performed by a qualified person.

Wood Framing
Framing must be sheathed as shown at Fig.3. A second D-ShakL™ anchor is used as a backer plate. Both anchors may be used for fall protection by 1 person at a time.

Concrete Substrates
Concrete wedge anchor or poured in place installations must be engineered by a competent or qualified person.
Daily and Semi-Annual Inspections

Perform inspection prior to each use. Anchors should be inspected by a qualified or “competent” person at least once a year and recorded on the inspection label. A record of inspections and removal of damaged anchors from service should be maintained. The following inspection points are guidelines only. Safety personnel are responsible for drafting their own fall protection inspection and maintenance program which may include the information contained in this manual. This manual does not address the condition of the structure to which the anchor is attached, but should be verified as capable of supporting the intended fall protection load.

Remove equipment from service if any of the following conditions are present:

Primary Inspection Points

1. Subjected to a free fall or other force.  
2. Obvious damage to any component.  
3. Has not been inspected annually.  
4. Fails to pass inspection.  
5. D-ring or shackle is bent or cut.  
6. D-Ring does not rotate freely.  
7. D-ring or shackle is heavily oxidized. Clean the surface and coat with cold galvanized zinc or exterior grade paint.

=Remove From Service  
=Perform Maintenance

Multiple Horizontal Lifelines

Shown at Fig 6a, anchors may be used to link multiple HLL together using end anchors and center/intermediate anchors. Do not exceed the worker capacity specified in Table 1.1 when multiple workers are attached to a HLL system with more than 1 leg.

Single HLL w/end anchors only:
- 2-person fall arrest
- 3-person work positioning

Table 1.0: Fixed Length Cables

<table>
<thead>
<tr>
<th>Cable Part No.</th>
<th>Nominal Length</th>
<th>Finished Length</th>
<th>Max. TC Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1335-10</td>
<td>10ft</td>
<td>11’-6”</td>
<td>10ft</td>
</tr>
<tr>
<td>1335-12</td>
<td>12ft</td>
<td>13’-6”</td>
<td>12ft</td>
</tr>
<tr>
<td>1335-14</td>
<td>14ft</td>
<td>16’</td>
<td>14ft</td>
</tr>
<tr>
<td>1335-16</td>
<td>16ft</td>
<td>18’-4”</td>
<td>16ft</td>
</tr>
<tr>
<td>1335-18</td>
<td>18ft</td>
<td>20’-6”</td>
<td>18ft</td>
</tr>
<tr>
<td>1335-20</td>
<td>20ft</td>
<td>23’</td>
<td>20ft</td>
</tr>
</tbody>
</table>

Includes Snaphook Lengths

D-ShakL™ may be used in a 360° radius overhead, on flat or sloped surfaces and vertical walls.

30° Angle Horizontal Lifeline (HLLS)

Consult SAS 2018 HLL 30° Fixed Length Manual for D-ShakL™ use with a HLL system. Use only SAS supplied HLL fixed length cables as specified in Table 1. Max spacing between anchors is 20ft. HLL systems supplied by others must be engineered by a competent or qualified person.

Table 1.1: No. of Workers for each HLL Leg

<table>
<thead>
<tr>
<th>Rigging Type</th>
<th>No. Anchors</th>
<th>Person per 1 Leg</th>
<th>Additional Leg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Arrest</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Fall Arrest</td>
<td>3 or more</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fall Restraint</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Fall Restraint</td>
<td>3 or more</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Note: When additional legs are added using a center anchor, the strength capacity for each leg is reduced.