# FALL SAFE TECHNICAL BULLETIN

# Compatibility of Skyline™ Horizontal Lifeline Systems with SRDs / PSRLs Having Maximum Arrest Force Greater than 900 lb

| | |
|---|---|
| **Effective Date** | 6-1-2026 |
| **Revision** | 4.0 |
| **Applies To** | Fall Safe Skyline™ Horizontal Lifeline systems used with selected SRDs / PSRLs with MAF greater than 900 lb |
| **Supersedes** | Technical Bulletin: Compatibility of Non-Reliance Products with Skyline™ Horizontal Lifeline Systems V1.0 |

## IMPORTANT USE STATEMENT

This bulletin is intended to supplement, not replace, the applicable Skyline™ HLL user instructions, the SRD / PSRL manufacturer instructions, the project-specific Fall Safe HLL Calculator output, and the judgment of the Qualified Person.

Do not use this bulletin as a stand-alone design document. Horizontal lifeline systems must be designed, installed, and used under the supervision of a Qualified Person as part of a complete personal fall arrest system that maintains a safety factor of at least two.

Configurations outside the stated limits require independent review and written approval by a Qualified Person and, when required, Fall Safe Engineering.

## 1. Purpose

This bulletin provides requirements for evaluating the compatibility of self-retracting devices (SRDs) and personal self-retracting lifelines (PSRLs) with Maximum Arrest Force (MAF) greater than 900 lb when used with Fall Safe Skyline™ Horizontal Lifeline (HLL) systems.

The bulletin includes two different types of guidance:

- General higher-MAF derating guidance for SRDs / PSRLs that exceed the standard 900 lb per-user input used by the Skyline HLL Calculator.
- A tested-use allowance for selected Leading Edge (LE) PSRLs in limited span or sub-span configurations, allowing increased actual user capacity when all stated conditions are met.

The tested-use allowance is limited to the devices, user counts, span lengths, calculator inputs, clearance adjustments, and system geometry described in this bulletin. It shall not be generalized to other devices, user counts, spans, or modified systems without additional review.

## 2. Scope and Applicability

This bulletin applies to Fall Safe Skyline™ cable HLL systems using approved Skyline components and a project-specific Fall Safe HLL Calculator output. The system must be installed, inspected, and used in accordance with the applicable Skyline instructions and the approved system calculation.

- Applicable use: Fall Safe Skyline™ HLL systems with SRDs / PSRLs having MAF greater than 900 lb, where the system is reviewed and approved by a Qualified Person.
- Applicable devices: Only the SRDs / PSRLs specifically addressed in this bulletin or independently approved by a Qualified Person based on manufacturer-published data.
- Excluded use: Any unapproved SRD / PSRL model, alternate lifeline component, modified stanchion support, alternate energy absorber, unverified anchorage, or configuration not shown in the approved HLL Calculator output.

## 3. Definitions

| Term | Definition |
|---|---|
| MAF | Maximum Arrest Force. The maximum force generated by an SRD / PSRL during fall arrest, as published by the SRD / PSRL manufacturer or determined by applicable testing. |
| MRC | Minimum Required Clearance. The minimum vertical clearance required below the walking / working surface or fall path to prevent contact with a lower level or obstruction. |
| SRD | Self-Retracting Device. This term includes SRLs and other self-retracting lifeline devices unless a more specific term is used. |
| PSRL | Personal Self-Retracting Lifeline. A compact SRD typically worn on the user's harness. |
| Span / Sub-Span | A span is the distance between end supports. A sub-span is the distance between adjacent supports or bypasses in a multi-span HLL system. |
| Continuous HLL System | The entire continuous Skyline HLL installation to which users are attached. Unless the approved calculation states otherwise, user capacity in this bulletin is the total actual user count on the continuous HLL system, not per sub-span. |
| Qualified Person | A person who, by degree, certificate, professional standing, or extensive knowledge, training, and experience, has demonstrated the ability to solve or resolve problems related to the subject matter, work, or project. |

## 4. Design Basis and General Requirements

Skyline HLL capacity and clearance are configuration dependent. Span length, sub-span length, stanchion height, support method, number of users, SRD / PSRL arresting force, and energy absorber behavior all affect final line tension and MRC.

- The approved Fall Safe HLL Calculator output must be generated for the actual installation and retained with the system documentation.
- The selected SRD / PSRL must be compatible with the complete fall arrest system and must be used within the manufacturer's instructions.
- The actual number of users on the system shall not exceed the lower of: the applicable table in this bulletin, the approved HLL Calculator output, the SRD / PSRL manufacturer's instructions, the anchorage capacity, or the Qualified Person's approved design.
- If the HLL Calculator output does not pass line tension, clearance, anchorage, or other project-specific limits, the configuration is not approved for use until revised and approved by a Qualified Person.
- The employer must ensure that users are trained, that a rescue plan is in place, and that all components are inspected before use and after any fall arrest event.

# 5. Tested-Use Allowance: Fall Safe Micro-Loc™ LE and Approved 3M Nano-Lok™ Edge PSRLs

This section provides a tested-use allowance and is the controlling section for the configurations listed in Table 1. The allowances in this section apply only when all listed conditions are met. They do not apply to other SRD / PSRL models, higher user counts, longer spans, alternate energy absorbers, modified system geometry, or unapproved components.

## 5.1 Applicable devices

- Fall Safe Micro-Loc™ LE Personal SRL, 8 ft working length, model series 42XX008, when used in accordance with current Fall Safe instructions and this bulletin.
- 3M™ DBI-SALA® Nano-Lok™ Edge Personal SRL models specifically reviewed and approved by Fall Safe Engineering for this application. Do not treat other 3M SRDs, other Nano-Lok variants, or other leading-edge PSRLs as approved unless they are specifically listed in the released bulletin or approved in writing for the project.
- Use of any other model, connector configuration, length, product revision, or manufacturer's equivalent requires independent evaluation and documented approval before use.

## 5.2 User capacity and span limitations

| Device | Maximum Span / Sub-Span Length | Maximum Actual User Capacity | Required HLL Calculator Input | Required Clearance Adjustment |
|---|---|---|---|---|
| Fall Safe Micro-Loc™ LE | ≤ 60 ft | 3 users total on the continuous HLL system | 4 users; back-mounted SRLs | Add 4 ft to calculator MRC |
| Approved 3M™ Nano-Lok™ Edge | ≤ 60 ft | 3 users total on the continuous HLL system | 4 users; back-mounted SRLs | Add 4 ft to calculator MRC |
| Fall Safe Micro-Loc™ LE | ≤ 30 ft | 4 users total on the continuous HLL system | 4 users; back-mounted SRLs | Add 4 ft to calculator MRC |

### Actual user capacity

The listed user capacity is the total number of users attached to the continuous HLL system, not the number of users per span or per sub-span, unless the approved project-specific calculation and Qualified Person approval state otherwise.

## 5.3 Required HLL Calculator inputs

For the tested-use allowance in Table 1, configure the Fall Safe HLL Calculator as follows:

- Span or sub-span length: not greater than the limit shown in Table 1.
- Number of users entered in calculator: 4 users.
- SRL configuration selected in calculator: back-mounted SRLs.
- Use only the approved Skyline components, stanchion height, support method, and anchorage configuration shown in the project-specific calculator output.

Entering 4 users in the calculator is a conservative modeling method used to account for the higher arrest forces and arrest behavior of the approved leading-edge PSRLs. It does not authorize 4 actual users unless 4 actual users are specifically allowed by Table 1 and the final system calculation is approved.

### 5.4 Required clearance adjustment

For all configurations in Table 1, add 4 ft to the MRC generated by the Fall Safe HLL Calculator.

The final required clearance must be the greatest of the following values:

- The Fall Safe HLL Calculator MRC plus 4 ft.
- The applicable SRD / PSRL manufacturer's required clearance for the actual anchorage location and work position.
- Any additional clearance required by the Qualified Person for swing fall, user offset, lower-level obstructions, worker height, harness stretch, free fall, edge geometry, or site-specific conditions.

**Do not stack the 1 ft and 4 ft Micro-Loc LE adjustments**

For the tested-use allowance in Table 1, the required adjustment is +4 ft. Do not add the separate 1 ft Micro-Loc LE retracted-length adjustment in addition to the +4 ft allowance unless Fall Safe Engineering or the Qualified Person requires additional clearance for the specific application.

## 6. Fall Safe Micro-Loc™ LE Use Outside the Tested-Use Allowance

The Fall Safe Micro-Loc™ LE has a published MAF of 1,200 lb. When Micro-Loc LE is used in a Skyline HLL configuration that is not covered by the tested-use allowance in Section 5, the higher-MAF calculator input method in Table 2 may be used only after Qualified Person review.

**Section 6 does not authorize increased capacity**

This section is a general higher-MAF derating method for Micro-Loc LE configurations outside Section 5. It does not authorize 4 actual users except where the Table 1 tested-use allowance applies.

| Actual Micro-Loc™ LE Use | Required HLL Calculator Input | Minimum Clearance Adjustment |
|---|---|---|
| 1 user @ 1,200 lb MAF | Enter as 2 users @ 900 lb | Add at least 1 ft to calculator MRC when the calculator is based on the standard Micro-Loc back-mounted SRL option. |
| 2 users @ 1,200 lb MAF | Enter as 3 users @ 900 lb | Add at least 1 ft to calculator MRC when the calculator is based on the standard Micro-Loc back-mounted SRL option. |
| 3 users @ 1,200 lb MAF | Enter as 4 users @ 900 lb | Add at least 1 ft to calculator MRC when the calculator is based on the standard Micro-Loc back-mounted SRL option. |

The 1 ft adjustment accounts for the longer retracted length of the Micro-Loc LE compared to the standard Micro-Loc used as the calculator baseline. The Qualified Person must determine whether additional clearance is required based on leading-edge use, foot-level anchorage, swing fall, user offset, or the Micro-Loc LE user instructions.

# 7. General Higher-MAF SRD / PSRL Derating Guidance

For SRDs / PSRLs other than the tested-use devices listed in Section 5, higher-MAF devices must be evaluated based on manufacturer-published MAF, arrest distance, deceleration distance, retracted length, connection geometry, and applicable use limitations. This bulletin does not authorize increased user capacity for untested SRDs / PSRLs.

## 7.1 Input adjustments

Use the following conversion method to model the higher arrest force using the standard 900 lb per-user input in the Fall Safe HLL Calculator. The actual configuration must still be approved by a Qualified Person.

| Fall Safe System Capacity Modeled in Calculator | 900 lb MAF Device | 1,350 lb MAF Device | 1,500 lb MAF Device | 1,800 lb MAF Device |
|---|---|---|---|---|
| 2 users (1,800 lb total modeled force) | 2 users | Derate to 1 actual user | Derate to 1 actual user | Derate to 1 actual user |
| 3 users (2,700 lb total modeled force) | 3 users | Derate to 2 actual users | Derate to 1 actual user | Derate to 1 actual user |
| 4 users (3,600 lb total modeled force) | 4 users | Derate to 2 actual users | Derate to 2 actual users | Derate to 2 actual users |

## 7.2 Clearance adjustments

If the selected SRD / PSRL has a greater arrest distance or greater retracted length than the baseline device used in the HLL Calculator, the excess distance must be added to the calculator MRC.

| SRD / PSRL Condition | Adjustment to Minimum Required Clearance |
|---|---|
| Baseline condition: arrest distance ≤ 24 in and retracted SRL length ≤ 12 in | Use HLL Calculator MRC as provided, unless the Qualified Person or manufacturer's instructions require additional clearance. |
| Additional arrest distance over 24 in | Add the excess arrest distance. Example: 42 in arrest distance is 18 in over baseline; add 1.5 ft. |
| Retracted SRL length over 12 in | Add the excess retracted length. Example: 18 in retracted length is 6 in over baseline; add 0.5 ft. |
| Combined additional distance | Add the total of both differences. Example: 42 in arrest distance plus 18 in retracted length equals 2 ft total added clearance. |

## 8. System Configuration, User Offset, and Tie-Back Stability

The Qualified Person is responsible for confirming system stability based on user movement, expected fall direction, stanchion support method, anchorage capacity, and offset from the lifeline centerline.

- For standard Micro-Loc Type 1 SRL applications, Skyline stanchions are typically rated for fall exposure within 6 ft of the lifeline centerline when tie-back cables are used, or 3 ft when strong-back supports are used.
- For higher-MAF devices, including leading-edge PSRLs, allowable user offset may be reduced. Unless otherwise approved by a Qualified Person and Fall Safe Engineering, limit work position to within 3 ft of the lifeline centerline when tie-back cables are used, or 2 ft when strong-back supports are used.
- If user exposure exceeds the applicable offset limits, additional tie-back cables may be required. Up to four tie-back cables, two per stanchion end, may be required to maintain system geometry and tension.
- A multi-span system must be evaluated for loading in both directions. Center or bypass stanchions in a two-span configuration may require support for both loading directions.
- Any uncertainty about tie-back requirements, stanchion loading, user offset, swing fall, or dynamic behavior must be reviewed with Fall Safe Engineering before use.

## 9. Non-Fall Safe HLL Systems Used with Skyline™ Stanchions

This bulletin does not change the limitations for using non-Fall Safe HLL systems with Skyline™ stanchions. Non-Fall Safe HLL systems are outside the tested-use allowance in Section 5 and require project-specific review by a Qualified Person.

- When properly installed with appropriate strong-back or tie-back support, Skyline stanchions may provide anchorage capacity up to 14,400 lb in a 2:1 engineered system. The actual installed anchorage capacity must be verified for the specific structure and support configuration.
- Non-Fall Safe HLL systems with maximum line tension greater than 7,000 lb are not permitted under this bulletin unless specifically approved in writing by Fall Safe Engineering and the Qualified Person.
- Fall Safe / SureWerx makes no performance claim for the user capacity, clearance, line tension, energy absorber behavior, or compatibility of third-party HLL systems used with Skyline™ stanchions.
- The HLL manufacturer's instructions, SRD / PSRL manufacturer's instructions, and the Qualified Person's documented design control the final allowable configuration.

## 10. Required Documentation Before Use

Before the system is released for use, the following documentation must be completed and retained with the system records:

- Project-specific Fall Safe HLL Calculator output for the actual installation.
- Approved device model, length, connector configuration, and manufacturer instructions for each SRD / PSRL used.
- Qualified Person approval identifying actual user capacity, span / sub-span lengths, MRC, support method, user offset, and anchorage requirements.
- Verification that final clearance is adequate using the greater of the calculator MRC plus any required adjustment, the SRD / PSRL manufacturer's required clearance, and site-specific clearance requirements.
- Inspection records for the HLL, stanchions, tie-backs / strong-backs, connectors, SRDs / PSRLs, and supporting structure.
- Site-specific rescue plan and user training documentation.

## 11. Limitations and Warnings

- Do not exceed the number of actual users allowed by this bulletin, the HLL Calculator output, the SRD / PSRL manufacturer's instructions, or the Qualified Person's design.
- Do not use this bulletin to approve unlisted SRDs / PSRLs, alternate energy absorbers, alternate cable systems, modified stanchions, unverified anchors, or non-standard support geometry.
- Do not reduce the required clearance based on field judgment alone. Clearance may increase due to swing fall, user offset, lower-level obstructions, edge geometry, free fall, harness stretch, user height, or SRD / PSRL behavior.
- Do not use any HLL, SRD / PSRL, connector, anchorage, stanchion, tie-back, or support component that has been subjected to fall arrest loading until it has been removed from service and evaluated in accordance with the applicable manufacturer instructions.
- If any requirement cannot be confirmed, the system must not be used until reviewed and approved by a Qualified Person and, where required, Fall Safe Engineering.

## 12. Regulatory and Standard References

The following references are included for design and review context. The Qualified Person must verify the applicable requirements for the jurisdiction, industry, and project before use.

- OSHA 29 CFR 1926.502(d)(8) - Horizontal lifelines designed, installed, and used under the supervision of a Qualified Person as part of a complete personal fall arrest system maintaining a safety factor of at least two.
- OSHA 29 CFR 1926.32(m) - Qualified Person definition.
- OSHA 29 CFR 1910.140 - Personal fall protection systems, as applicable.
- ANSI/ASSP Z359.6 - Specification and Design Requirements for Active Fall Protection Systems.
- ANSI/ASSP Z359.14 - Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems.
- Current Fall Safe Skyline™ HLL instructions and applicable Fall Safe / Reliance component instructions.
- Current SRD / PSRL manufacturer instructions for each device used.

# Fall Safe 30ft Two-User Single-Span

FALL SAFE™

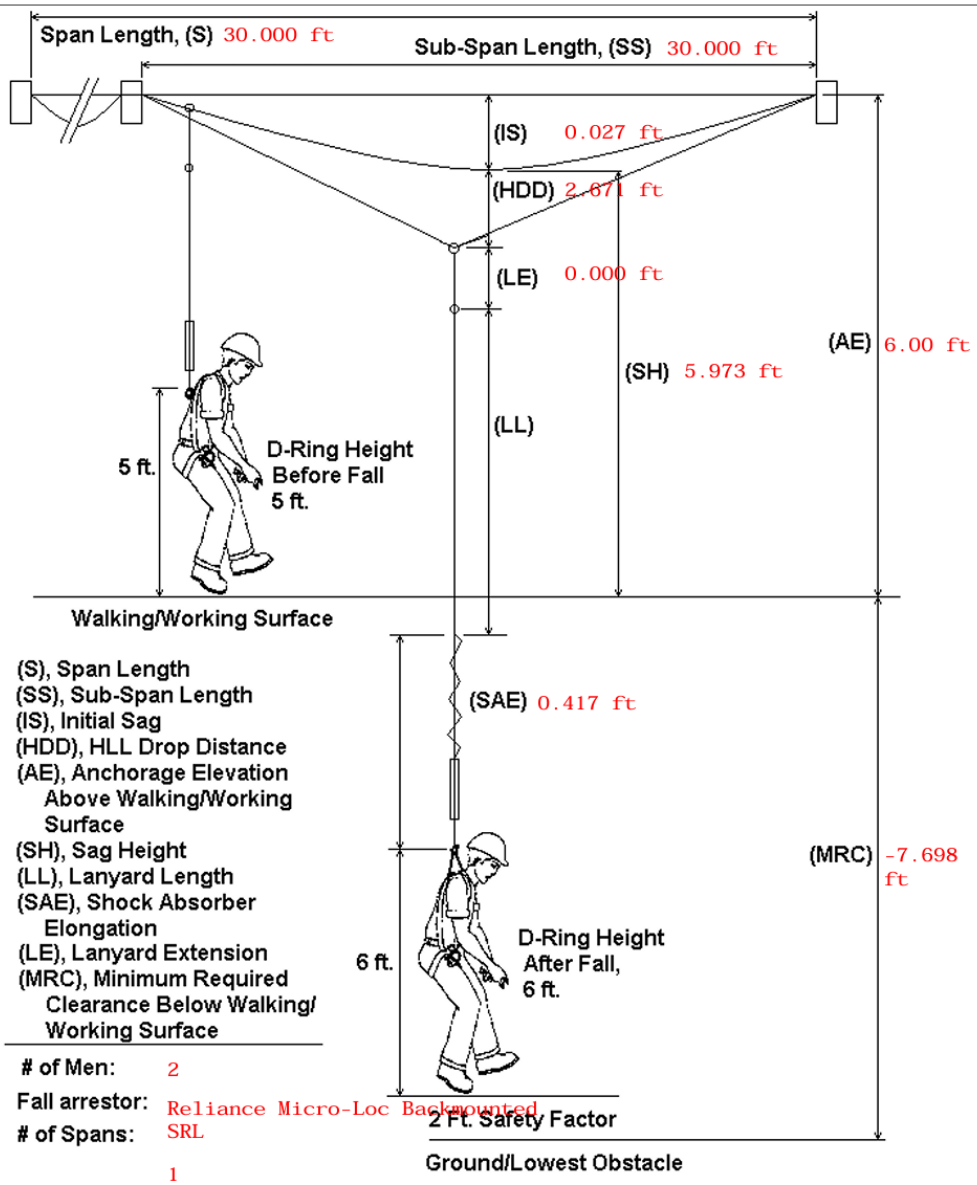
## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -7.698 ft |
| Min. Required Anchor Strength | 5,784.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 2,892.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 2.671 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.973 ft |
| Initial Sag (IS) | 0.027 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 0 |
| Number of End Supports | 2 |
| Number of Sub-spans | 1 |
| Number of People on HLL | 2 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 30.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 30.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 30ft Two-User Single-Span

FALL SAFE™



# Fall Safe 30ft Four-User Single-Span

FALL SAFE™

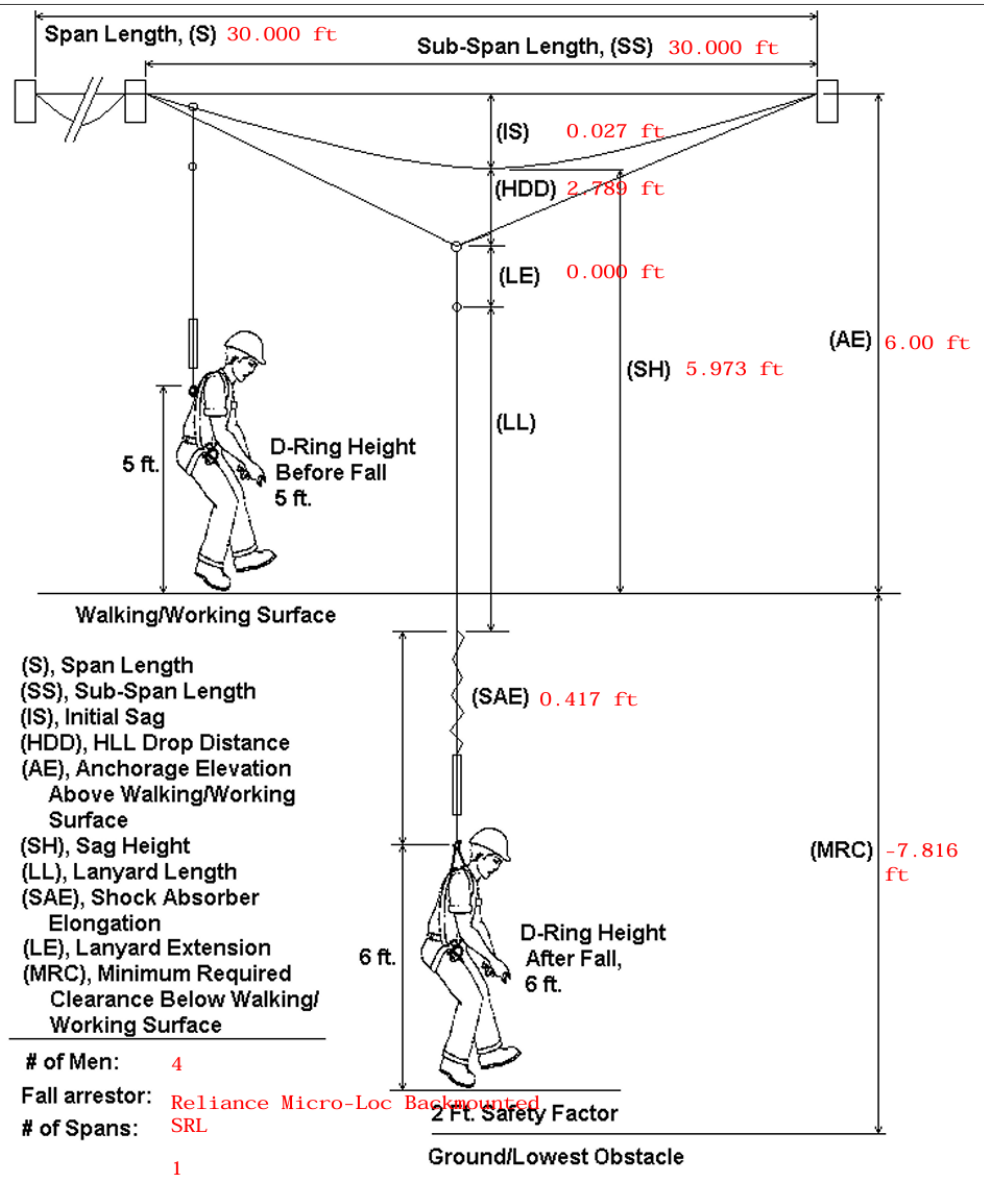
## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -7.816 ft |
| Min. Required Anchor Strength | 8,294.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 4,147.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 2.789 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.973 ft |
| Initial Sag (IS) | 0.027 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 0 |
| Number of End Supports | 2 |
| Number of Sub-spans | 1 |
| Number of People on HLL | 4 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 30.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 30.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 30ft Four-User Single-Span

FALL SAFE™



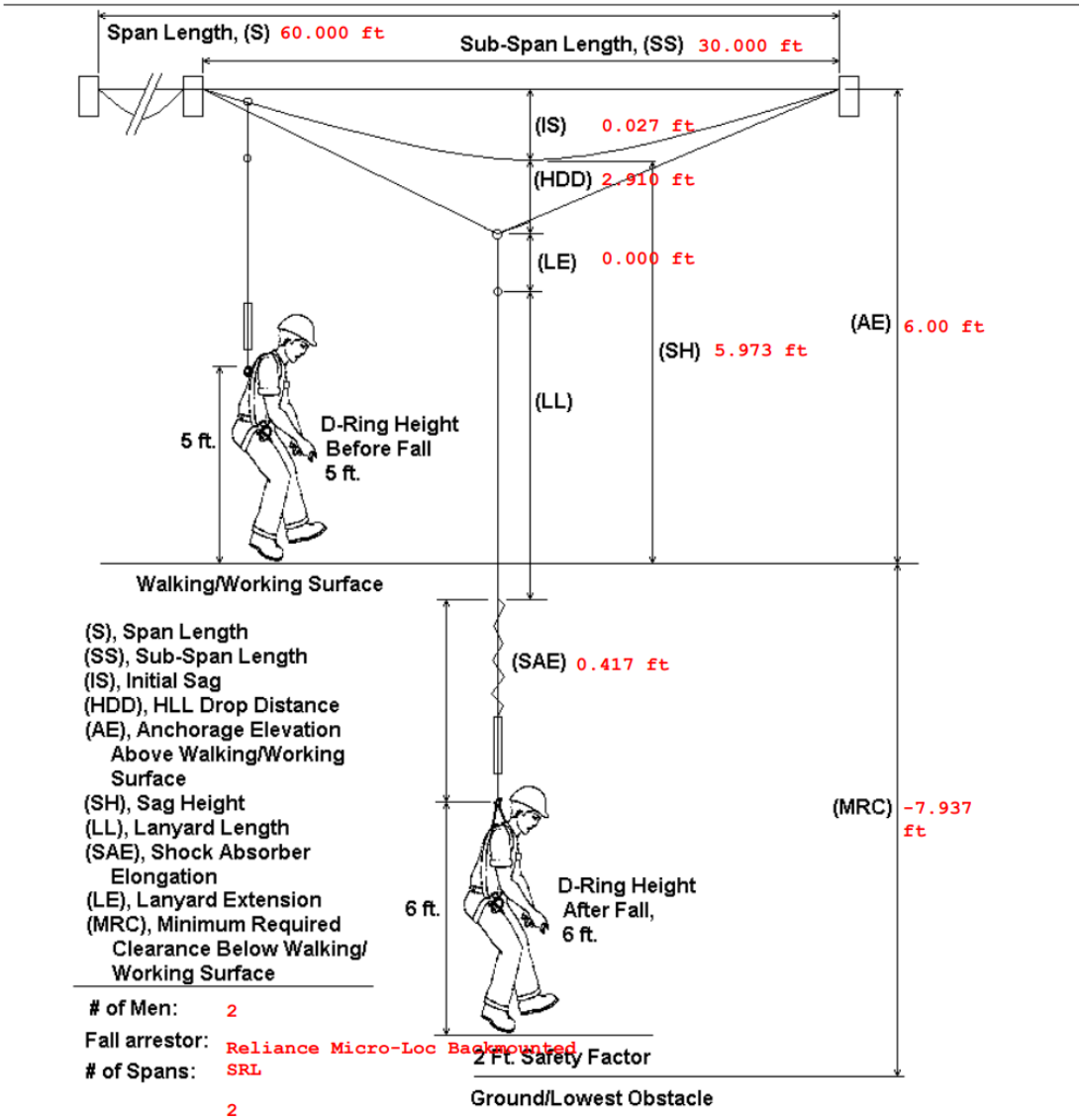
# Fall Safe 60ft Two-User 2-Span

## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -7.937 ft |
| Min. Required Anchor Strength | 5,784.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 2,892.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 2.910 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.973 ft |
| Initial Sag (IS) | 0.027 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 1 |
| Number of End Supports | 2 |
| Number of Sub-spans | 2 |
| Number of People on HLL | 2 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 30.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 60.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 60ft Two-User 2-Span



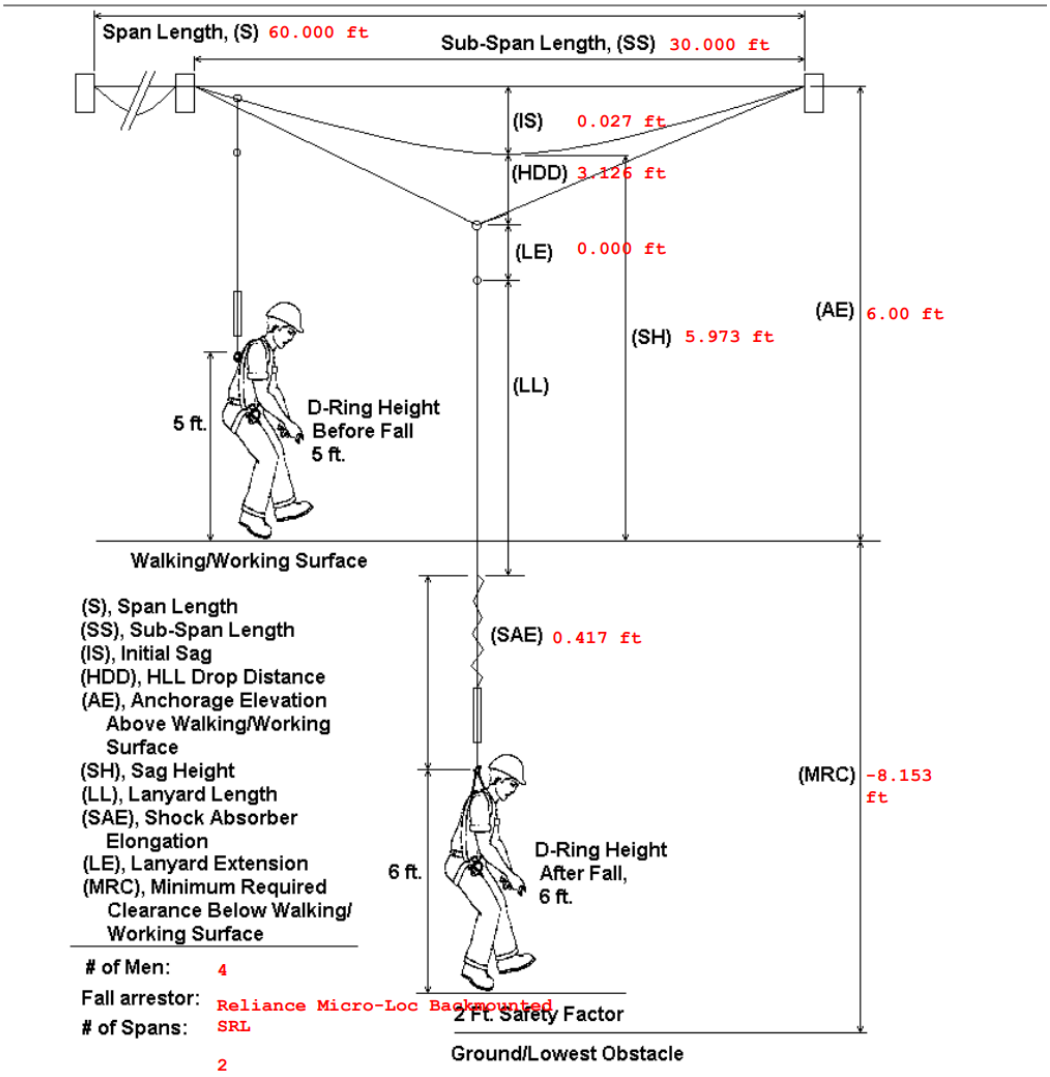
# Fall Safe 60ft Four-User 2-Span

## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -8.153 ft |
| Min. Required Anchor Strength | 8,294.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 4,147.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 3.126 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.973 ft |
| Initial Sag (IS) | 0.027 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 1 |
| Number of End Supports | 2 |
| Number of Sub-spans | 2 |
| Number of People on HLL | 4 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 30.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 60.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 60ft Four-User 2-Span



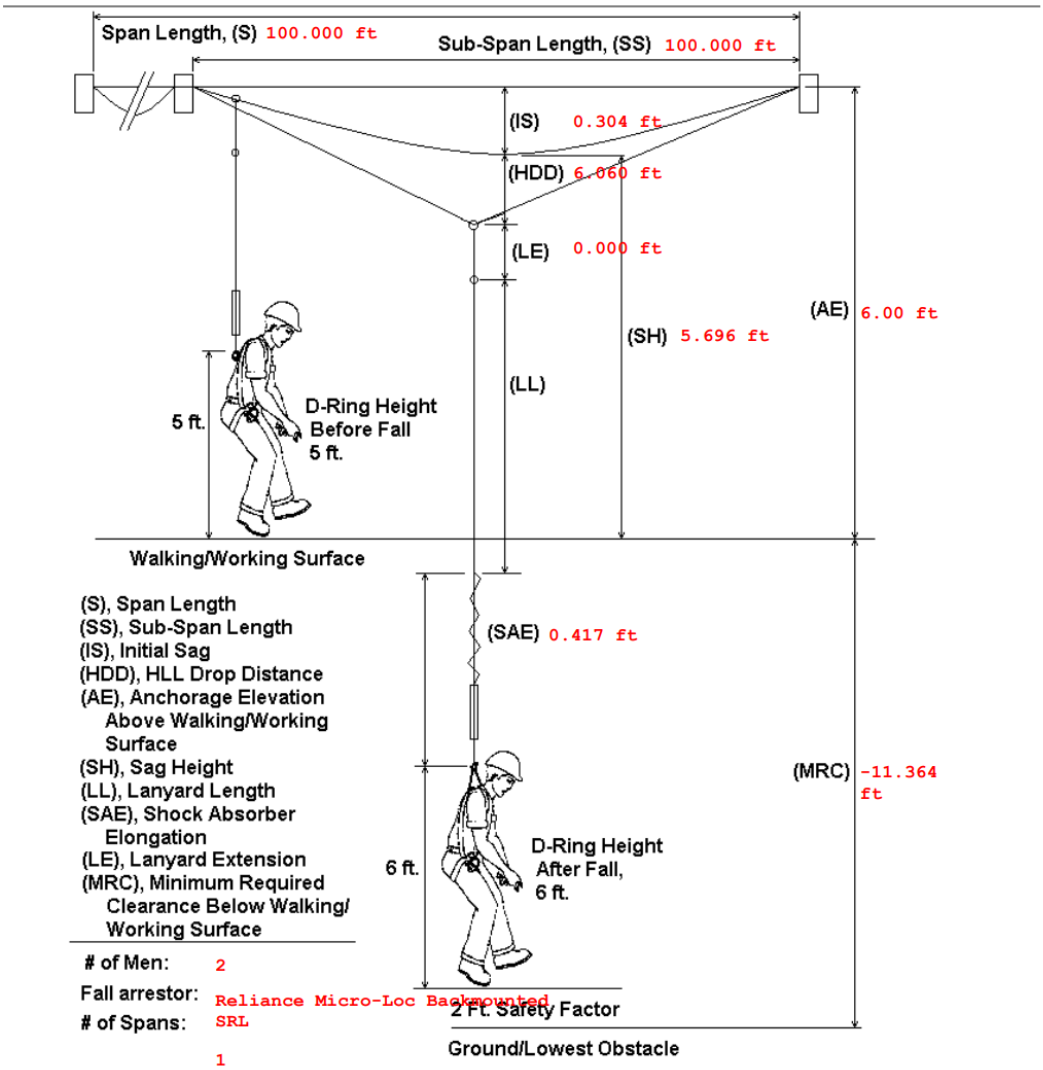
# Fall Safe 100 ft Two-User Single-Span

## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -11.364 ft |
| Min. Required Anchor Strength | 8,800.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 4,400.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 6.060 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.696 ft |
| Initial Sag (IS) | 0.304 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 0 |
| Number of End Supports | 2 |
| Number of Sub-spans | 1 |
| Number of People on HLL | 2 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 100.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 100.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 100 ft Two-User Single-Span



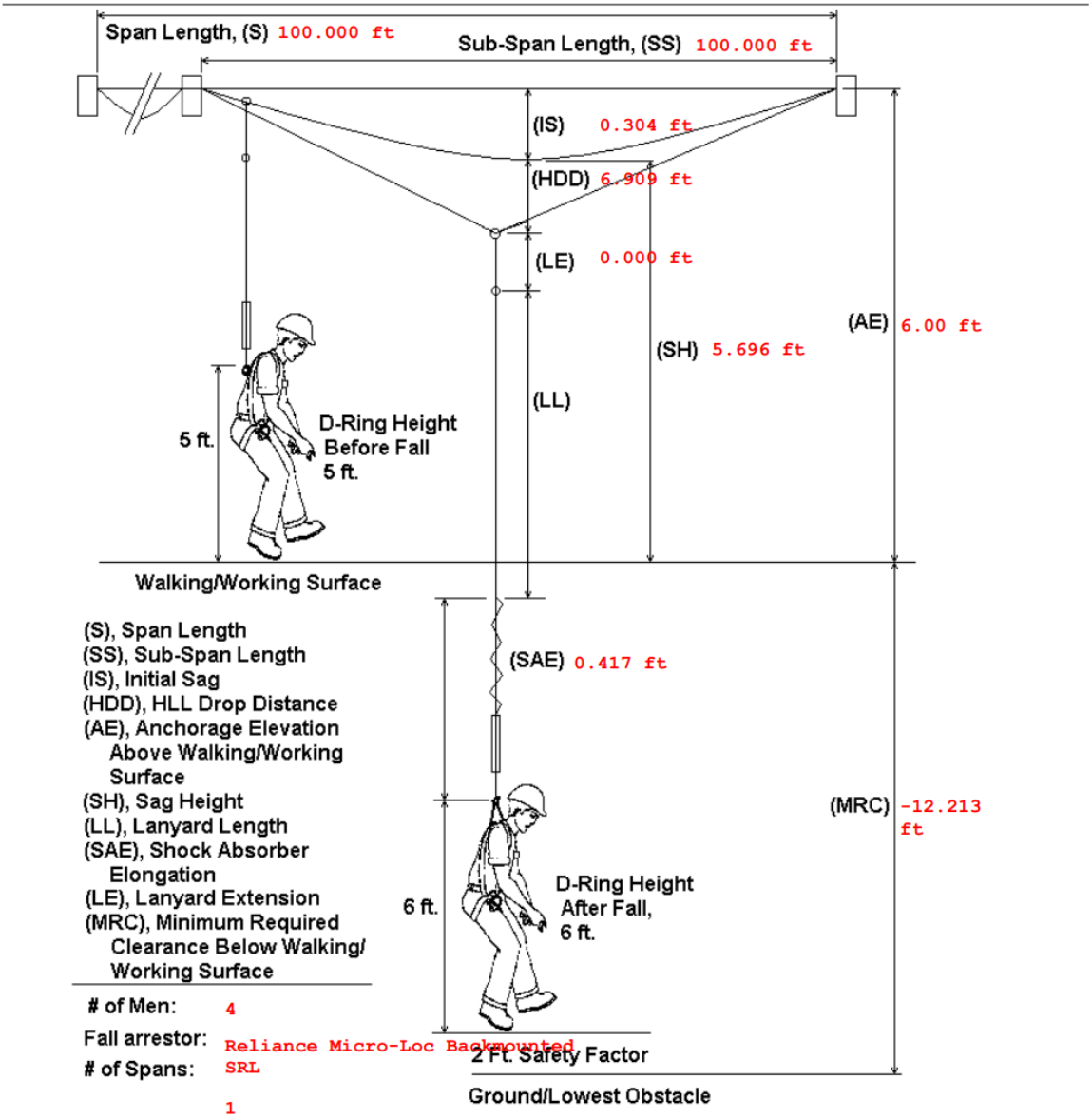
# Fall Safe 100 ft Four-User Single-Span

## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -12.213 ft |
| Min. Required Anchor Strength | 12,808.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 6,404.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 6.909 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.696 ft |
| Initial Sag (IS) | 0.304 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 0 |
| Number of End Supports | 2 |
| Number of Sub-spans | 1 |
| Number of People on HLL | 4 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 100.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 100.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 100 ft Four-User Single-Span



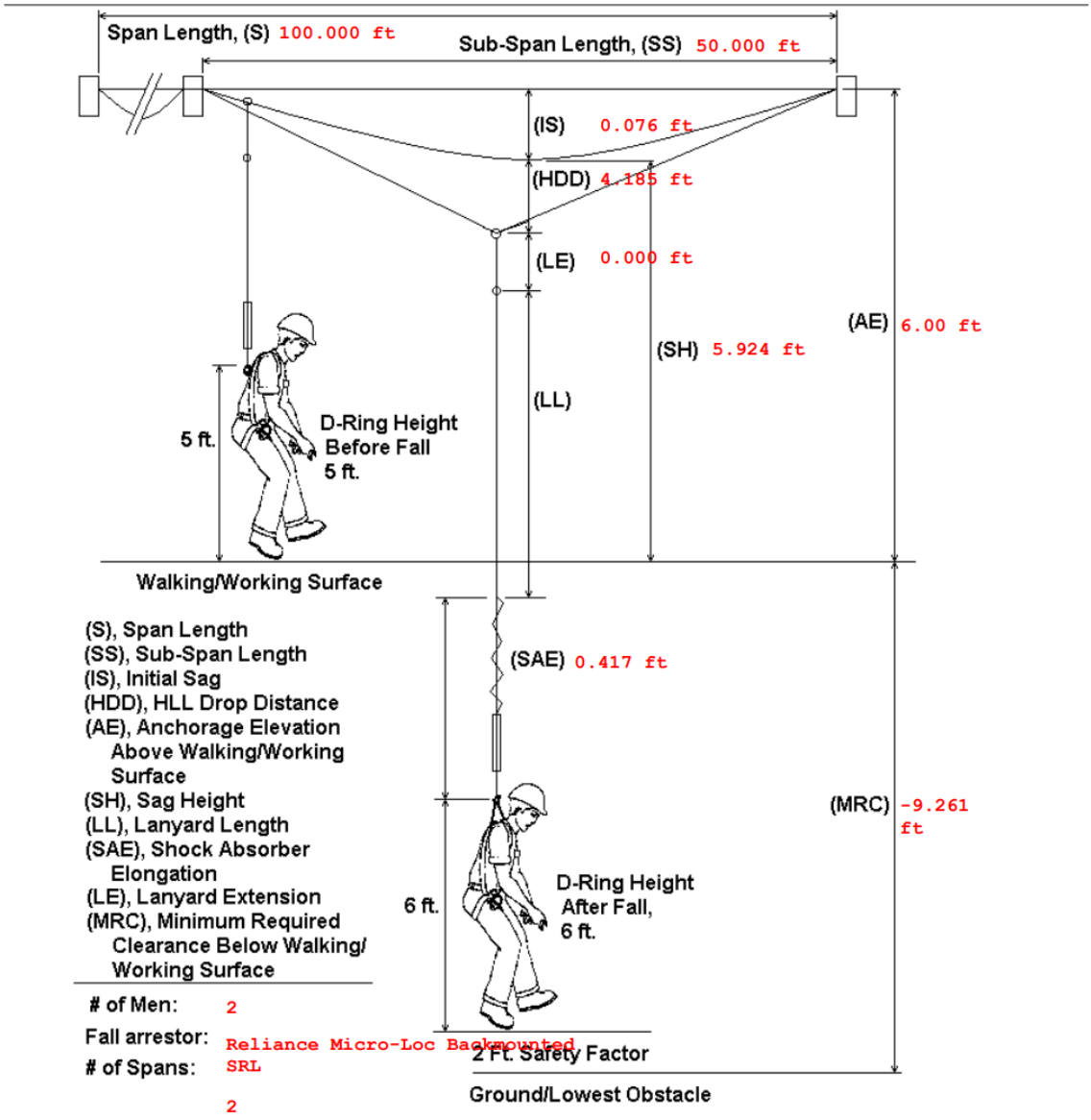
# Fall Safe 100 ft Two-User 2-Span

## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -9.261 ft |
| Min. Required Anchor Strength | 6,646.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 3,323.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 4.185 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.924 ft |
| Initial Sag (IS) | 0.076 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 1 |
| Number of End Supports | 2 |
| Number of Sub-spans | 2 |
| Number of People on HLL | 2 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 50.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 100.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 100 ft Two-User 2-Span



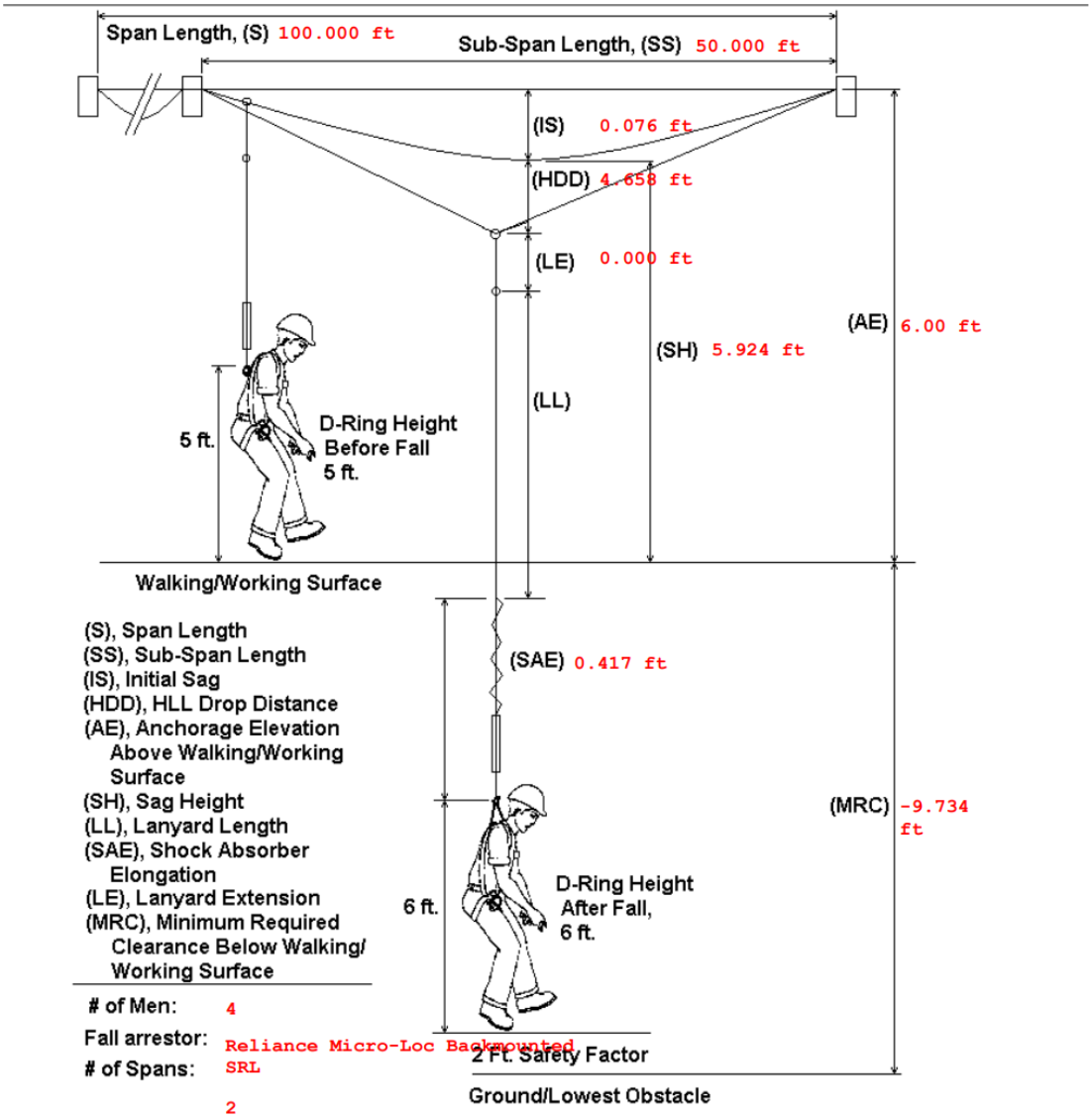
# Fall Safe 100 ft Four-User 2-Span

## Horizontal LifeLine Calculation Results

| | |
|---|---|
| Min. Required Clearance (MRC) | -9.734 ft |
| Min. Required Anchor Strength | 9,584.000 lbs |
| Anchorage Elevation (AE) | 6.00 ft |
| Final Line Tension | 4,792.000 lbs |
| Final Vertical Length | -0.830 ft |
| Free Fall Distance (FFD) | 0.830 ft |
| HLL Drop Distance (HDD) | 4.658 ft |
| HLL Line Material | IPS_Wire_Rope |
| HLL Sag Height (SH) | 5.924 ft |
| Initial Sag (IS) | 0.076 ft |
| Lanyard Extension Length (LE) | 0.000 ft |
| Number of Center Supports | 1 |
| Number of End Supports | 2 |
| Number of Sub-spans | 2 |
| Number of People on HLL | 4 |
| Shock Absorbing Lanyard Length | 6.00 ft |
| Skyline SAE Elongation | 0.417 ft |
| Sub-Span Length (SS) | 50.000 ft |
| Shock Absorber Extension (SAE) | 2.000 ft |
| Total Span Length (S) | 100.000 ft |
| Vertical Lanyard Type | Reliance Micro-Loc Backmounted SRL |

**NOTE**: The Final Line Tension and Min. Required Clearance numbers are certified traceable to test results by Reliance Engineering. Only Shock absorbing lanyards and SRL's with 900 lbs. MAF shock absorbtion may be used. This sheet makes no claim to determining whether a Skyline HLL System is right for a particular application or situation.

# Fall Safe 100 ft Four-User 2-Span



# Qualified Person Responsibilities Statement:

The proper use of Fall Safe Skyline™ Horizontal Lifeline (HLL) stanchions with non-Fall Safe HLL systems or fall arrest devices requires the oversight, evaluation, and documented approval of a Qualified Person as defined by OSHA 29 CFR 1926.32(m). When configuring systems using any third-party horizontal lifeline components or self-retracting devices (SRDs), the following responsibilities apply:

**System Compatibility and Anchorage Evaluation**

- The Qualified Person must verify that any third-party HLL system does not exceed **7,000 lbs. maximum line tension** during dynamic loading.
- They must confirm that **stanchion anchorage capacity** (up to 14,400 lbs. when used with appropriate tie-back or strong-back support) is not exceeded based on the selected lifeline design, span length, number of users, and type of energy absorber.

**Clearance and User Capacity Determination**

- All **fall clearance requirements** must be evaluated and documented using manufacturer data for the specific HLL and SRDs being deployed.
- The Qualified Person must account for **variations in arrest distance, deceleration extension, and energy absorber performance**, especially when using SRDs with arrest distances or retracted length values exceeding 24" and 12" respectively.
- **User capacity** must be calculated based on both the arresting force of the SRD and the design of the HLL system. The use of SRDs with Maximum Arrest Forces (MAF) above 900 lbs. may require derating the number of allowed users per span or system.

**System Configuration and Tie-Back Stability**

- The Qualified Person is responsible for ensuring **system stability** based on expected user movement and offset from the lifeline centerline.
    - For typical applications, stanchions are rated for fall exposure within **6 feet** of the lifeline's centerline when tie-backs are used, or **3 feet** with strong-backs.
    - If user exposure exceeds these limits, up to **four tie-back cables** (two per stanchion end) may be required to maintain proper system geometry and tension.
    - Any uncertainty about tie-back requirements, loading, or dynamic behavior must be reviewed in consultation with **Fall Safe Engineering** prior to deployment.

**Limitations and Disclaimer Acknowledgment**

- The Qualified Person must acknowledge that **SureWerx and Fall Safe make no warranty or performance claims** for non-Fall Safe HLL systems or arrest devices used with Skyline™ stanchions.
- It is the responsibility of the Qualified Person to ensure full compliance with OSHA 1910.140, 1926.502(d)(8), ANSI Z359.6, and Z359.14 standards when configuring systems involving mixed components.

All evaluations, decisions, and modifications must be **documented** and retained in accordance with company safety policy and applicable regulations.