

Mine Safety Appliances Company · John T. Ryan Memorial Lab 1100 Cranberry Woods Drive, Cranberry Township, PA 16066

## MSA Engineering Self Certification of Standard Compliance IAC 035-Z04

**Statement of Compliance:** This SureClimb Cable Vertical Lifeline System meets the requirements of ANSI/ASSE Z359.1-2007, Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components.

Tested part number(s) or IAC No.:	"Sold as" part number(s)/Market:
IAC 035	SEE ATTACHED COMPLIANCE REPORT

Test Facility & Document #: Intertek - G100628266CRT-005

## PERFORMANCE DETAILS

(May format as needed)

List standard and referenced sections as applicable	Results	Pass / Fail
SEE ATTACHED COMPLIANCE REPORT		

For additional information about this product(s), please contact MSA Customer Service at 1-800-MSA-2222 (for industrial products) or Safety Works Customer Service at 1-800-969-7562 (for retail products). When requesting information, please reference "sold as" part number(s).

Quality Assurance: 4

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Date: Sept 14, 2012

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## ANSI Z359.7 3rd Party Testing Compliance Report Revision 0

"Sold As" Part numbers	10045504, 10099969 SFPLS350XXX* SFPLS353XXX* SFPLS354XXX*  *"XXX" indicates the length of the lifeline in feet, for example "030" is 30 ft.		
ANSI Z359.1-2007 Requirement	Results	Pass/Fail	
.2.7 Vertical Lifeline Component			
<b>2.7.1</b> Connectors used with vertical lifelines shall meet the equirements of 3.2.1.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass	
2.7.2 Synthetic Rope Lifeline			
3.2.7.2.1 Rope used in vertical lifelines shall be made of virgin synthetic materials having strength, aging, abrasion resistance, and heat resistance characteristics equivalent or superior to polyamides. Synthetic rope shall have an elastic elongation of not more than 22% at a load of 1,800 pounds (8kN) when tested in accordance with references 8.3.2 or 3.3.3, as applicable.	N/A	N/A	
3.2.7.2.2 Formed eye terminations in rope shall be made in accordance with the cordage manufacturer's ecommendation subject to the following requirements. Spliced eyes in layed ropes having three or more strands shall have a minimun of four tucks. A properly sized thimble shall be part of the formed eye termination. Knots shall not be used for load-bearing end terminations. Formed eye erminations shall have a minimum breaking strength of 90% of the synthetic rope when tested in accordance with eference 8.3.2. Terminations (including cut ends) and spliced shall be seized, whipped, or otherwise integrally inished to prevent the terminations or splice from unraveling or unsplicing.	N/A	N/A	
3.2.7.2.3 Synthetic rope used in vertical lifelines shall have a minimum breaking strength of 5,600 pounds (25kN) when ested in accordance with reference 8.3.3.	N/A	N/A	
3.2.7.3 Wire Rope Lifeline			
3.2.7.3.1 Wire rope used in vertical lifelines shall be a minimum of 0.3125 inches (8mm) diameter and shall be constructed in accordance with references 8.2.2 and 8.3.5, as applicable.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass	
3.2.7.3.2 Formed eye terminations of wire rope shall have a minimum breaking strength of 84% of the wire rope when ested in accordance with reference 8.4.4. The following are acceptable methods of formed spliced eyes: a) spliced eye with one swaged fitting, or b) return eye with a minimum of two swaged fittings, or c) return eye with a minimum of three wire rope clips tightened in accordance with the clip manufacturer's specifications. All formed eyes shall ncorporate a properly sized thimble.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass	
3.2.7.3.2 Wire rope shall have a minimum breaking strength of 6,000 pounds (27kN) when tested in accordance with reference 8.4.4.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass	
3.3.5 Vertical Lifeline Subsystem (VLLSS). Components comprising VLLSS shall meet the requirements for those components set forth in this standard. Subsystem connections shall be geometrically compatible to reduce the possibility of rollout. Integral connections such as splicing shall be made in accordance with the requirements for vertical lifelines. VLLSS shall have a minimum strength of 5,000 pounds (22.2kN).	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass	



## ANSI Z359.7 3rd Party Testing Compliance Report Revision 0

IAC 035 - SURECLIMB™ CABLE VERTICAL LIFELINE SYSTEMS				
"Sold As" Part numbers	10045504, 10099969 SFPLS350XXX* SFPLS353XXX* SFPLS354XXX*  *"XXX" indicates the length of the lifeline in feet, for example "030" is 30 ft.			
ANSI Z359.1-2007 Requirement	Results	Pass/Fail		
3.3.6 Fall Arrester Connecting Subsystem (FACSS) Components comprising a FACSS shall meet the respective requirements for the FACSS component parts set forth in this standard. Subsyster connectors shall be geometrically compatible to reduce the possibility of rollout. Integral connections (e.g. splicing) shall be made in accordance with the requirements for lanyards, vertical lifelines, vertical lifelines subsystems, or energy absorbers, as applicable, set forth herein. The length of that portion of the FACSS between the fall arrester and the fall arrest attachment on the harness shall not exceed 36 inches (914mm).	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass		
3.3.6.1 When tested in accordance with the dynamic performance test in 4.4.1, the fall arrester shall lock on the lifeline and remain locked until released. Arrest distance shall not be greater than 54 inches (1,372mm). The maximum arrest force shall not exceed 1,800 pounds (8kN).	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass		
3.3.6.2 When tested in accordance with the dynamic strength test in 4.4.2, the fall arrester shall lock on the lifeline and remain locked until released. The lifeline shall retain a minimum strength of 1,000 pounds (4.4kN) tensile strength. The test weight shall not strike the ground. No component, constituent or element shall show signs of breaking or failure.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass		
<b>3.3.6.3</b> The requirements of this section shall apply to each lifeline type allowed for use with the fall arrester.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass		
3.3.6.4 Fall arresters and lifelines which are intended for use in adverse or extreme environments shall meet the requirements of Section 3.3.6 after subjecting the components to conditioning procedures before performing the specified tests.	MSA SureClimb Cable Vertical Lifeline Systems meet this requirement.	Pass		