



# Test Report

## ANSI/ISEA 121-2018

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Manchester, NH 03103  
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**Test Report Number:** 20210930COLDSH275X3  
**Job Number:** 121 COLDSH 275X3 NO GEO, 121 COLDSH 275X3 WITH GEO  
**Product SKU#:** COLDSH275X3  
**Product Type:** Tool Attachments  
**Product Description:** Cold Shrink Attachment 70mm x 76mm (2.75" x 3")  
**Testing Standard(s):** ANSI/ISEA 121-2018  
**Date(s) of Testing:** 6/08/2018

### REQUIREMENT VERIFICATION

| <u>Requirement Description</u>       | <u>Clause/Section</u>        | <u>Result</u>    |
|--------------------------------------|------------------------------|------------------|
| General Requirements                 | 3.1 General                  | Meets or Exceeds |
| Markings, Labeling, and Instructions | 9. Markings and Instructions | Meets or Exceeds |

### VERIFICATION TESTING

| <u>Test Description</u>                                          | <u>Test Date</u> | <u>Clause/Section</u>                             | <u>Result</u> |
|------------------------------------------------------------------|------------------|---------------------------------------------------|---------------|
| Independent Dynamic Test<br>(Dry, Interrupted Geometry Mandrel)  | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Wet, Interrupted Geometry Mandrel)  | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Cold, Interrupted Geometry Mandrel) | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Hot, Interrupted Geometry Mandrel)  | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Dry, Straight Mandrel)              | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Wet, Straight Mandrel)              | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Cold, Straight Mandrel)             | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |
| Independent Dynamic Test<br>(Hot, Straight Mandrel)              | 6/08/2018        | 5.3.3 Dynamic Test Procedure for Tool Attachments | Pass          |

This test report covers these additional products:

Please contact [quality@guardianfall.com](mailto:quality@guardianfall.com) for signed report.

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>3.1</b>   | <b>General</b>                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
| <b>3.1.1</b> | Demonstration of conformity to the requirements of this standard shall be in accordance with ANSI/ISEA 125-2014, <i>American National Standard for Conformity Assessment of Safety and Personal Protective Equipment</i> . The manufacturer shall select the level of conformity assessment claimed, and such level shall be clearly indicated in any claim, in any form, that references compliance with ANSI/ISEA 125-2014.              | Meets or Exceeds |
| <b>3.1.2</b> | Manufacturers shall not claim compliance with any part of the requirements of this standard and shall not use the name or identification of this standard in any statements regarding their respective products unless the product conforms fully to this standard.                                                                                                                                                                        | Meets or Exceeds |
| <b>3.2</b>   | <b>Documentation</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |
| <b>3.2.1</b> | Dropped object solutions shall be tested to verify compliance with the requirements specified in this standard. At a minimum, the information found in the Performance Testing Report shall be maintained by the manufacturer.                                                                                                                                                                                                             | Meets or Exceeds |
| <b>3.2.2</b> | A declaration of Conformity shall be developed for all models for which manufacturer's claims of compliance with this standard are made. At a minimum, the information found on the form in Appendix B2 shall be provided.<br><br>NOTE: A product solution with design parameters equivalent to a compliant product solution may be considered compliant if variations do not affect the integrity of the product's design or performance. | Meets or Exceeds |
| <b>3.2.3</b> | The issuer of the Declaration of Conformity shall have procedures in place to ensure the continued conformity of the product, as delivered or accepted, with the stated requirements of the declaration of conformity. The issuer of the Declaration of Conformity shall have procedures in place to re-evaluate the validity of the Declaration of Conformity, in the event of:                                                           |                  |
| <b>a</b>     | changes significantly affecting the design or specification of the product;                                                                                                                                                                                                                                                                                                                                                                | Meets or Exceeds |
| <b>b</b>     | changes in the standards to which conformity of the product is stated;                                                                                                                                                                                                                                                                                                                                                                     | Meets or Exceeds |
| <b>c</b>     | changes in the ownership or structure of the supplier, if relevant; or                                                                                                                                                                                                                                                                                                                                                                     | Meets or Exceeds |
| <b>d</b>     | relevant information indicating that the product may no longer conform to the specified requirements.                                                                                                                                                                                                                                                                                                                                      | Meets or Exceeds |

## Notes

|            |                                                                                                                                                        |                  |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>9</b>   | <b>Markings and Labeling</b>                                                                                                                           |                  |
| <b>9.1</b> | <b>General</b><br>Each solution shall be marked. The marking shall be:                                                                                 | Meets or Exceeds |
|            | on the product itself or on labels attached to the product                                                                                             | Meets or Exceeds |
|            | permanently affixed so as to be visible and legible                                                                                                    | Meets or Exceeds |
|            | provided in at least English                                                                                                                           | Meets or Exceeds |
| <b>9.2</b> | <b>Product Label Requirements</b><br>The following information shall be included on labeling attached to the solution:                                 |                  |
| <b>a</b>   | Name, trademark or other means of identification of the manufacturer (for all solutions);                                                              | Meets or Exceeds |
| <b>b</b>   | Product identification (number, date code and/or serial number) (for all solutions);                                                                   | Meets or Exceeds |
| <b>c</b>   | Published capacity (ies), identified by weight (for all solutions)                                                                                     | Meets or Exceeds |
| <b>d</b>   | Number of this specific ANSI standard (ANSI/ISEA 121-2018)                                                                                             | Meets or Exceeds |
| <b>e</b>   | Tether length (for tool tethers only);                                                                                                                 | Meets or Exceeds |
| <b>f</b>   | Max tether length (for anchor points, attachments and if applicable, containers).                                                                      | Meets or Exceeds |
| <b>9.3</b> | <b>Instructions for Use</b><br>Manufacturers shall provide instructions for use for solutions. At a minimum, the following information shall be given: |                  |
| <b>a</b>   | Necessary warnings of misuse                                                                                                                           | Meets or Exceeds |
| <b>b</b>   | Limitations on use.                                                                                                                                    | Meets or Exceeds |
| <b>c</b>   | Minimum and maximum size for geometry of solutions including but not limited to tool diameter, person size, etc.                                       | Meets or Exceeds |
| <b>d</b>   | Inspection details.                                                                                                                                    | Meets or Exceeds |
| <b>e</b>   | Clearance distance, if different from max tether length.                                                                                               | Meets or Exceeds |

## Notes

### 5.3.3 Tool Attachment Dynamic Test *dry w/geometry, requirements per 5.3.3*

- a) Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- b) Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- c) Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- d) The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- e) Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test *dry w/geometry, requirements per 5.3.3*

| Requirement                | Sample # 01 | Sample # 01 | Sample # 01 |
|----------------------------|-------------|-------------|-------------|
| Drop Sequence              | 1           | 2           | 3           |
| Freefall distance (in.)    | 96          | 96          | 96          |
| Test Weight (lb)           | 8           | 8           | 8           |
| 8 lb Test weight arrested? | Yes         | Yes         | Yes         |
| Result/Assessment          | Pass        | Pass        | Pass        |

### 5.3.3 Tool Attachment Dynamic Test *wet w/geometry, requirements per 5.3.3*

- a) Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- b) Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- c) Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- d) The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- e) Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test *wet w/geometry, requirements per 5.3.3*

| Requirement                | Sample # 02 | Sample # 02 | Sample # 02 |
|----------------------------|-------------|-------------|-------------|
| Drop Sequence              | 1           | 2           | 3           |
| Freefall distance (in.)    | 96          | 96          | 96          |
| Test Weight (lb)           | 8           | 8           | 8           |
| 8 lb Test weight arrested? | Yes         | Yes         | Yes         |
| Result/Assessment          | Pass        | Pass        | Pass        |

### Notes

### 5.3.3 Tool Attachment Dynamic Test

*cold w/geometry, requirements per 5.3.3*

- a) Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- b) Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- c) Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- d) The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- e) Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test

*cold w/geometry, requirements per 5.3.3*

| Requirement                | Sample #<br>03 | Sample #<br>03 | Sample #<br>03 |
|----------------------------|----------------|----------------|----------------|
| Drop Sequence              | 1              | 2              | 3              |
| Freefall distance (in.)    | 96             | 96             | 96             |
| Test Weight (lb)           | 8              | 8              | 8              |
| 8 lb Test weight arrested? | Yes            | Yes            | Yes            |
| Result/Assessment          | Pass           | Pass           | Pass           |

### 5.3.3 Tool Attachment Dynamic Test

*hot w/geometry, requirements per 5.3.3*

- a) Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- b) Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- c) Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- d) The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- e) Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test

*hot w/geometry, requirements per 5.3.3*

| Requirement                | Sample #<br>04 | Sample #<br>04 | Sample #<br>04 |
|----------------------------|----------------|----------------|----------------|
| Drop Sequence              | 1              | 2              | 3              |
| Freefall distance (in.)    | 96             | 96             | 96             |
| Test Weight (lb)           | 8              | 8              | 8              |
| 8 lb Test weight arrested? | Yes            | Yes            | Yes            |
| Result/Assessment          | Pass           | Pass           | Pass           |

## Notes

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### 5.3.3 Tool Attachment Dynamic Test

#### *dry straight, requirements per 5.3.3*

- a) Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- b) Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- c) Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- d) The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- e) Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test

#### *dry straight, requirements per 5.3.3*

| Requirement                | Sample #<br>05 | Sample #<br>05 | Sample #<br>05 |
|----------------------------|----------------|----------------|----------------|
| Drop Sequence              | 1              | 2              | 3              |
| Freefall distance (in.)    | 96             | 96             | 96             |
| Test Weight (lb)           | 8              | 8              | 8              |
| 8 lb Test weight arrested? | Yes            | Yes            | Yes            |
| Result/Assessment          | Pass           | Pass           | Pass           |

### 5.3.3 Tool Attachment Dynamic Test

#### *wet straight, requirements per 5.3.3*

- a) Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- b) Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- c) Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- d) The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- e) Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test

#### *wet straight, requirements per 5.3.3*

| Requirement                | Sample #<br>06 | Sample #<br>06 | Sample #<br>06 |
|----------------------------|----------------|----------------|----------------|
| Drop Sequence              | 1              | 2              | 3              |
| Freefall distance (in.)    | 96             | 96             | 96             |
| Test Weight (lb)           | 8              | 8              | 8              |
| 8 lb Test weight arrested? | Yes            | Yes            | Yes            |
| Result/Assessment          | Pass           | Pass           | Pass           |

### Notes

### 5.3.3 Tool Attachment Dynamic Test

*cold straight, requirements per 5.3.3*

- Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test

*hot straight, requirements per 5.3.3*

| Requirement                | Sample # 07 | Sample # 07 | Sample # 07 |
|----------------------------|-------------|-------------|-------------|
| Drop Sequence              | 1           | 2           | 3           |
| Freefall distance (in.)    | 96          | 96          | 96          |
| Test Weight (lb)           | 8           | 8           | 8           |
| 8 lb Test weight arrested? | Yes         | Yes         | Yes         |
| Result/Assessment          | Pass        | Pass        | Pass        |

### 5.3.3 Tool Attachment Dynamic Test

*hot straight, requirements per 5.3.3*

- Attach one end of the test cable to the connection point on the tool attachment and the other end to the fixed anchor point. The test weight shall be positioned in a way to expose the weakest orientation of the tool attachment.
- Install test fixture onto fixed anchor point. Attach the tool attachment to the test fixture in a position that exposes the weakest orientation of the tool attachment. Attach one end of the test cable to the tool attachment and the other end to an independent test weight.
- Perform a drop with a test weight equal to the manufacturer's published capacity with a free fall distance of twice the specified test tether length allowed by the manufacturer.
- The test weight shall be released from a point no more than 6 in. horizontally from the center of the fixed anchor point. The test weight shall be oriented in a way that allowed the weight to experience a straight fall.
- Follow this procedure for two additional drops. A total of three drops shall be recorded.

### 5.3.3 Tool Attachment Dynamic Test

*hot straight, requirements per 5.3.3*

| Requirement                | Sample # 08 | Sample # 08 | Sample # 08 |
|----------------------------|-------------|-------------|-------------|
| Drop Sequence              | 1           | 2           | 3           |
| Freefall distance (in.)    | 96          | 96          | 96          |
| Test Weight (lb)           | 8           | 8           | 8           |
| 8 lb Test weight arrested? | Yes         | Yes         | Yes         |
| Result/Assessment          | Pass        | Pass        | Pass        |

### Notes