









# Product Name: Construction Tux™ Harness

Part # 02100; 02110; 02110; 02110; 02120; 02130; 02140; 02200; 02210; 02200; 02210; 02115; 02115; 02115; 02115; 02135; 02145; 02755; 02725; 02725; 02726; 02720; 02770; 02

#### **Instruction Manual**

Do not throw away these instructions! Read and understand these instructions before using equipment!

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#### Introduction

Thank you for purchasing a Guardian Fall Protection Construction Tux™ Harness. This manual must be read and understood in its entirety, and used as part of an employee training program as required by OSHA or any applicable state agency.

This and any other included instructions must be made available to the user of the equipment. The user must understand how to safely and effectively use the Construction Tux™ Harness, and all fall safety equipment used in combination with the Construction Tux™ Harness.

User Information						
Date of First Use:						
Trainer:						
User:						

## **Applicable Safety Standards**

When used according to instruction specifications, this product meets or exceeds all applicable OSHA 1926 Subpart M, OSHA 1910, ANSI Z359.1-2007, and ANSI A10.32-2012 standards for fall protection. Applicable standards and regulations depend on the type of work being done, and also might include state regulations if applicable. Consult regulatory agencies for more information on personal fall arrest systems and associated components.

### **Worker Classifications**



Understand the following definitions of those who work near or who may be exposed to fall hazards.

**Qualified Person:** A person with an accredited degree or certification, and with extensive experience or sufficient professional standing, who is considered proficient in planning and reviewing the conformity of fall protection and rescue systems.

**Competent Person:** A highly trained and experienced person who is ASSIGNED BY THE EMPLOYER to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and application. A person who is proficient in identifying existing and predictable fall hazards, and who has the authority to stop work in order to eliminate hazards.

**Authorized Person:** A person who is assigned by their employer to work around or be subject to potential or existing fall hazards.

It is the responsibility of a Qualified or Competent person to supervise the job site and ensure all applicable safety regulations are complied with.



## **Product Specific Applications**



Use of equipment in unintended applications may result in serious injury or death. Maximum 1 attachment per connection point.



**Personal Fall Arrest:** Construction Tux<sup>™</sup> Harness may be used to support a MAXIMUM 1 PFAS for use in Fall Arrest applications. Structure must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum free fall is 6′, or up to 12′ if used in combination with equipment explicitly certified for such use. Applicable D-ring: Dorsal.



Restraint: Construction Tux™ Harness may be used in Restraint applications. Restraint systems prevent workers from reaching the leading edge of a fall hazard. Always account for fully deployed length of lanyard/SRL. Structure must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. No free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4/12 (vertical/horizontal). Applicable D-rings: Dorsal, Chest, Side, Shoulder.



**Work Positioning:** Construction Tux<sup>™</sup> Harness may be used in Work Positioning applications. Work Positioning systems allow a worker to be supported while in suspension and work freely with both hands. Structure must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. Maximum allowable free fall is 2′. Applicable D-rings: Side.



**Rescue/Confined Space:** Construction Tux<sup>™</sup> Harness may be used in Rescue/Confined Space applications. Rescue systems function to safely recover a worker from a confined location or after exposed to a fall. There are various configurations of Rescue systems depending on the type of rescue. Structure must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. No free fall is permitted. Applicable D-rings: Dorsal, Chest, Shoulder.

For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-420 lbs.

#### **Limitations**

Fall Clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 3' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors.

# Diagram shown is an example fall clearance calculation ONLY.

**Swing Falls:** Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to in line with the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of a fall.

#### **FALL CLEARANCE CALCULATION** Lanyard length (6' total) Deceleration Required distance (4' total) distance from anchorage (19' total) Height of harness dorsal D-ring from worker's feet (6' total) Safety factor (3' total)



**Compatibility:** When making connections with Construction Tux™ Harness, eliminate all possibility of roll-out. Roll-out occurs when interference between a hook and the attachment point causes the hook gate to unintentionally open and release. All connections must be selected and deemed compatible with Construction Tux™ Harness by a Competent Person. All connector gates must be self-closing and self-locking, and withstand minimum loads of 3,600 lbs. See the following for examples of compatible/incompatible connections:

Connector closed and locked to D-ring. **OK.** 



to take the second seco

Connector to integral lanyard. **NO.** 

Two connectors to same D-ring. NO.



Connector directly to webbing.

Incompatible or irregular application, which may increase risk of roll-out, NO.







Connector directly to horizontal lifeline. NO.









## **Components and Specifications**

Materials: Nylon, Cotton Duck, polyester, Banox FR3, and galvanized steel.

Part #	Sizes	Description	Part #	Sizes	Description
02101, 02111, 02121, 02131, 02141	S, M, L, XL, 2XL	Orange Mesh Construction Tux™	06051, 06061, 06071, 06081, 06091	S, S, M, L, XL, 2XL	Green Mesh Construction Tux™ w/Chest D-ring
02200, 02210, 02220, 02230, 02240	S, M, L, XL, 2XL	Green Mesh Construction Tux™	062100, 062110, 062120, 062130, 062140	S, M, L, XL, 2XL	Orange Mesh Construction Tux™ w/Die-Electric D-rings & Powder-Coated Buckles
02105, 02115, 02125, 02135, 02145	S, M, L, XL, 2XL	HI-VIS Construction Tux™	062200, 062210, 062220, 062230, 062240	S, M, L, XL, 2XL	Green Mesh Construction Tux™ w/Die-Electric D-rings & Powder-Coated Buckles
02705, 02715, 02725, 02735, 02745	S, M, L, XL, 2XL	Surveyor's Construction Tux™	062200, 062210, 062220, 062230, 062240	S, M, L, XL, 2XL	Black Mesh Construction Tux™ w/Die-Electric D-rings & Powder-Coated Buckles
13610, 13620, 13630	M, L, XL	Sport Tux™	06000, 06010, 06020, 06030, 06040	S, M, L, XL, 2XL	Black Mesh Construction Tux™ w/Chest D-ring
02700, 02710, 02720, 02730, 02740	S, M, L, XL, 2XL	Red Mesh Construction Tux™	06050, 06060, 06070, 06080, 06090	S, M, L, XL, 2XL	Green Mesh Construction Tux™ w/Chest D-ring
13010, 13020, 13030	M, L, XL	Jacket Tux™	20132, 20133, 20134, 20135, 20136	S, M, L, XL, 2XL	Black Mesh Construction Tux™ w/Tapered Shoulders & Extra Belt Loop
13220, 13210, 13220, 13230, 13240	S, M, L, XL, 2XL	Green Hi-Viz Zip On/Off Long Sleeves Tux™ Harness	20164, 20165, 20166, 20167, 20168, 20196, 20197	2XS, XS, S, M, L, XL, 2XL	Blue Flex Tux™



Part #	Sizes	Description	Part #	Sizes	Description
13300, 13310, 13320, 13330, 13340	S, M, L, XL, 2XL	Orange Hi-Viz Zip On/Off Long Sleeves Tux™ Harness	22200, 22210, 22220, 22230, 22240	S, M, L, XL, 2XL	Fire Retardant Green Mesh Construction Tux™ w/D51 Fabric & RF Silver Reflective Lining
12305, 12315, 12325, 12335, 12345	S, M, L, XL, 2XL	Blue Duck Flex Construction Tux™	02111, 02121, 02131, 02141	M, L, XL, 2XL	Orange Mesh Construction Tux™ w/TB Legs
02600, 02610, 02620, 02630, 02640	S, M, L, XL, 2XL	Black Mesh Construction Tux™	02010, 02020, 02030, 02040	M, L, XL, 2XL	Sleeveless Zip-In Fleece Liner for Tux™ Harness
02405, 02415, 02425, 02435, 02445	S, M, L, XL, 2XL	Black Duck w/Mesh Construction Tux™	02015, 02025, 02035, 02045	M, L, XL, 2XL	Zip-In Fleece Liner for Tux™ Harness w/Long Sleeves
02305, 02315, 02325, 02335, 02345	S, M, L, XL, 2XL	Blue Duck w/Mesh Construction Tux™	02150, 02151, 02153, 02153, 02154	S, M, L, XL, 2XL	Deluxe Construction Mesh Tux™ w/PT Chest, TB Legs, & Side D-rings. Orange.
02205, 02215, 02225, 02235, 02245	S, M, L, XL, 2XL	Brown Duck w/Mesh Construction Tux™	02155, 02156, 02157, 02158, 02159	S, M, L, XL, 2XL	Deluxe Construction Mesh Tux™ w/PT Chest, TB Legs, & Side D-rings. Black.
03010, 03020, 03030, 03040	M, L, XL, 2XL	Camouflage Construction Tux™	02160, 02161, 02162, 02163, 02164	S, M, L, XL, 2XL	Deluxe Construction Mesh Tux™ w/PT Chest, TB Legs, & Side D-rings. Green.
02500, 02510, 02520, 02530, 02540	S, M, L, XL, 2XL	Arc Flash Construction Tux™ (ASTM F887-05 Compliant)	02300, 02310, 02320, 02330, 02340	S, M, L, XL, 2XL	Blue Duck w/Fleece Construction Tux™
02615, 02625, 02635, 02645	M, L, XL, 2XL	Rescue/Retrieval Construction Tux™	12115, 12125, 12135, 12145	S, M, L, XL	Super Hi-Viz Tux™ - Special Class 2 Design
06500, 06510, 06520, 06530	S, M, L, XL	Arc Flash Tux™ w/Front D-ring (ASTM F887-05 Compliant)			

#### **Installation and Use**

All personal fall arrest system (PFAS) equipment must be selected and deemed compatible with Construction Tux™ Harness by a Competent Person. ALWAYS follow all instructions of all equipment used in combination with Construction Tux™ Harness. NEVER attach connector to any place on harness other than D-ring. Connector gate must be self-closing and self-locking, and must withstand minimum load of 3,600 lbs. Any excess strap webbing MUST be stored in harness Webbing Keepers.

To connect Pass-Through Buckle, angle male buckle so it is positioned to pass up and through female buckle. Fully insert male buckle so that it lies flat on top of female buckle.





To connect Tongue Buckle, pull webbing strap through framed tongue component, and insert framed tongue through grommet to secure.

Roller and Friction Adjustments allow the user to make adjustments to Construction Tux™ Harness straps. Feed webbing through buckle, and slide the buckle down on the strap to tighten, or slide the buckle up on the strap to loosen.



To adjust dorsal D-ring, slide placard up or down webbing. Dorsal D-ring must rest between the middle of the shoulder blades.

#### Dorsal D-ring, chest strap, shoulder straps, and leg straps MUST be fitted for each individual user.



1. Hold at dorsal D-ring, and fully inspect harness according to specifications of this instruction manual. Ensure all straps are not twisted and all buckles are unfastened.



 Place harness shoulder straps over shoulders. Ensure dorsal D-ring faces out, and is adjusted to rest between the middle of the shoulder blades.



3. Connect leg straps around thighs. Ensure there is no twisting of webbing. Leg straps should never dangle or hang loose.





4. Adjust chest strap height to lower chest level, approximately 6" from top of shoulders. Connect chest strap. Ensure there is no twisting of webbing.



5. Adjust chest, leg, and shoulder straps so they fit snugly, but still allow for a full range of movement.

# **WARNING**

Any twisting of webbing, or straps that are fitted too loose or too tight, can significantly increase the risk of serious injury or death in the event of a fall.

Some steps of adorning a harness may require assistance from another person. Upon completely adorning a harness, Guardian Fall Protection recommends that another person, with knowledge of the safe and correct use of the harness, inspect to ensure the harness is being worn correctly.

## Maintenance, Cleaning, and Storage

If a Construction Tux™ Harness fails inspection in any way, immediately remove it from service, and contact Guardian to inquire about its return or repair.

Cleaning after use is important for maintaining the safety and longevity of Construction Tux™ Harness. Remove all dirt, corrosives, and contaminants from Construction Tux™ Harness before and after each use. If a Construction Tux™ Harness cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean Construction Tux™ Harness with corrosive substances.

When not in use, store equipment where it will not be affected by heat, light, excessive moisture, chemicals, or other degrading elements.

## Inspection

Prior to EACH use, inspect Construction Tux™ Harness for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, broken stitching, fraying, and missing or illegible labels. IMMEDIATELY remove Construction Tux™ Harness from service if defects or damage are found, or if exposed to forces of fall arrest.

Ensure that applicable work area is free of all damage, including, but not limited to, debris, rot, rust, decay, cracking, and hazardous materials. Ensure that selected work area will support the application-specific minimum loads set forth in this instruction manual. Work area MUST be stable.

At least every 6 months, a Competent Person other than the user must inspect Construction Tux™ Harness.

Competent Person inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent Person must sign their initials in the box corresponding to the month and year the inspection took place.

During inspection, consider all applications and hazards Construction  $Tux^{\mathsf{TM}}$  Harness has been subjected to.



## **Inspection Log**

<b>Date of First Use:</b>	

Product lifetime is indefinite, as long as product passes all inspection requirements. User must inspect prior to EACH use. Competent Person other than user must complete formal inspection at least every 6 months. Competent Person to inspect and initial.

This inspection log must be specific to one Construction Tux™ Harness. Separate inspection logs must be used for each Construction Tux™ Harness. All inspection records must be made visible and available to all users at all times.

	J	F	M	A	M	J	J	A	S	O	N	D
YR												
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YR												

If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE.

## **Safety Information**



Failure to understand and comply with safety regulations may result in serious injury or death. Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

Do not alter equipment. Do not misuse equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a Competent Person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to. Fall protection equipment must be chosen by a Competent Person. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased new and in an unused condition.

Fall protection systems must be selected and installed under the supervision of a Competent Person, and used in a compliant manner. Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations. Forces applied to anchors must be calculated by a Competent Person.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRLs. Class A SRLs must arrest falls within 24"; Class B SRLs must arrest falls within 54".

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be of compatible size and configuration. Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.



A pre-planned rescue procedure in the case of a fall is required. The rescue plan must be project-specific. The rescue plan must allow for employees to rescue themselves, or provide an alternative means for their prompt rescue. Store rescue equipment in an easily accessible and clearly marked area.

Training of Authorized Persons to correctly erect, disassemble, inspect, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.

NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.

Equipment subjected to forces of fall arrest must immediately be removed from use.

Age, fitness, and health conditions can seriously affect the worker should a fall occur. Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform set-up of equipment. Pregnant women and minors must not use this equipment.

Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.

#### Labels

