

Cristiani School of Circus Arts: Rigging & Safety FAQ

Technical Information for Municipal Directors, Risk Managers, Facility Engineers, and Parents

This document provides transparent, engineering-focused answers regarding the installation, operation, and multi-layered safety compliance of our youth aerial arts program within municipal gymnasiums [Your Circus School Name].

1. LEGAL COMPLIANCE & LIABILITY PROTECTION

QUESTION: How is the city legally protected from liability?

A: The Cristiani School of Circus Arts operates under an institutional, double-insulated risk management framework designed to completely isolate the city from legal exposure:

- **Mandatory Parent Liability Waivers:** Every parent or legal guardian is strictly required to execute a comprehensive, legally binding Acrobatic & Aerial Arts Liability Release Waiver during the registration process on the city portal. A student profile cannot complete digital checkout, and the child cannot step onto the gymnasium mats, without this verified signature on file.
- **Commercial General Liability Insurance:** Our program carries a specialized multi-million dollar commercial general liability policy specifically underwritten for aerial and acrobatic sports (**standard limits of \$1,000,000 per occurrence / \$2,000,000 aggregate**, or higher if required by the city) [Cristiani School of Circus Arts].
- **Full Indemnification:** Before a single mat touches your floor, the **Cristiani School of Circus Arts** will issue a **Certificate of Insurance (COI)** explicitly naming the **City and the Community Center** as Additionally Insured, fully indemnifying the municipality [Cristiani School of Circus Arts].

QUESTION: What does the mandatory parental waiver cover?

ANSWER: In compliance with Pennsylvania municipal recreation standards, the waiver establishes a transparent "**Assumption of Risk**" protocol. Parents must explicitly acknowledge that circus arts involve specialized athletic movements (**climbing, hanging, upside-down suspension, and tumbling**) and voluntarily accept those inherent athletic risks, completely releasing both the **City Parks and Recreation Department and the Cristiani School of Circus Arts from liability**.

2. STRUCTURAL INTEGRITY & LOAD CAPACITIES

QUESTION: How much weight will be put on our ceiling beams?

ANSWER: We design all rigging points to adhere to strict entertainment and acrobatic safety factors (**typically a 5:1 or 10:1 safety ratio**).

- **Static Load:** A single child or teen hanging on an apparatus exerts roughly **100–150 lbs of static force**.
- **Dynamic Load:** To account for drops and drops-with-momentum, we engineer each single point to safely handle an ultimate dynamic load limit.
- **Beam Requirement:** We only rig from structural steel I-beams or open-web steel joists rated to support a **minimum of 2,000 to 2,500 lbs of dynamic force per point**. *We will verify this with your facility blueprints before any installation.*

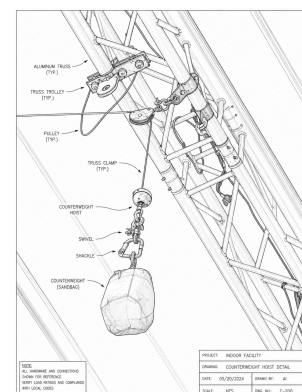
QUESTION: Will you be drilling into or altering our structural beams?

ANSWER: Absolutely not. The Cristiani School of Circus Arts uses non-destructive, wrap-around rigging methods. We utilize heavy-duty, rated synthetic spansets (**slings**) or **specialized beam clamps that wrap tightly around the existing steel profiles**. **This method requires zero drilling, welding, or permanent modification to your facility's infrastructure** [Cristiani School of Circus Arts].

3. DAILY OPERATIONS & MULTI-USE COMPLIANCE

QUESTION: Will the aerial equipment interfere with our basketball, volleyball, or community events?

A: No. Your gymnasium remains a multi-use space. We install a secure pulley and aircraft-cable system at each rigging point [Your Circus School Name]. At the end of every class, all apparatuses (silks, hoops, trapezes) are lowered, unclipped, and stored away in our secure storage area [Your Circus School Name]. The remaining overhead lines are hoisted completely out of bounds to the ceiling line and locked to a wall-mounted cleat box, leaving the court entirely clear and safe for ball sports [Your Circus School Name].



Q: How long does the setup and teardown take each day?

A: Daily setup of the actual mats and apparatuses takes 10–15 minutes before class, and teardown takes less than 10 minutes after class. The overhead pulley lines stay up permanently but remain completely out of sight and out of play.

4. EQUIPMENT SAFETY & MATTING

QUESTION: What happens if a student falls?

ANSWER: Safety is maintained through strict safety precautions, sometimes with height limits, but mostly with **Safety Lanyards (Longes)** (belay systems) and crash mats are essential Personal Protective Equipment (PPE). Lanyards prevent falls from height during dynamic moves, while crash mats dissipate impact forces during drops or dismounts. We place industry-standard, 8-inch to 12-inch bi-folding crash mats directly beneath every active aerial point, and Cristiani School of Circus Arts instructors utilize hands-on spotting techniques for all new maneuvers. Proper use and maintenance of these tools are non-negotiable for aerial arts and acrobatics

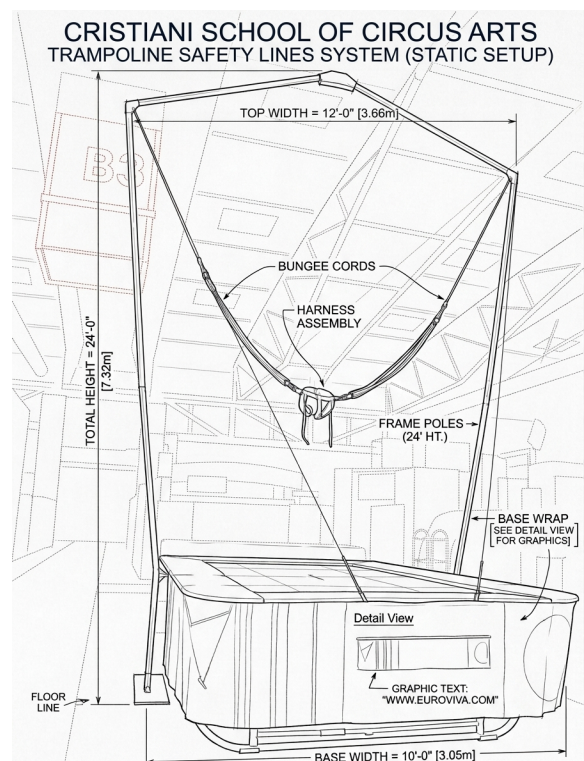
QUESTION: What are Safety Lanyards (Longes)?

ANSWER: A safety lanyard (also called a longe or Mechanic) connects the aerialist to a secondary safety line, catching them if they lose their grip or fall.

Use: Used extensively on aerial trapeze (especially flying trapeze), aerial hoops, and trampoline. They allow performers to attempt high-risk release, catch, and rotation moves while securely tethered.

Safety & Mechanics:

- **Fall Arrest vs. Restraint:** Fall-arrest lanyards incorporate shock absorbers to distribute forces across the torso and prevent extreme whiplash in the event of a hard fall.



- **Inspection:** Lanyards are subject to wear and tear. They must be regularly inspected for fiber degradation, checked for deploying impact indicators, and retired immediately after a major fall.
- **Clearance:** Rigging lanyards must be the correct length to prevent the aerialist from hitting the ground or the trampoline frame during a catchable fall.

QUESTION: MATS AND PADS. Can you explain to me in detail, what are they, where are they used and how are they applied?

ANSWER: At the **Cristiani School of Circus Arts**, mats and pads are essential for all circus arts acts. With us, you will always see them under all aerial apparatuses (Aerial Silks, Lira, Web, Single Trapeze, Ect) surrounding trampolines, and no doubt tumbling, and acrobatics. Mats are essential for safety and skill development. **Cheer mats** provide the primary, firm tumbling surface; **folding tumbling mats** help shape skills; and thick **crash mats/pads** act as lifelines to safely absorb heavy impacts and falls from an elevated apparatus.

1. CHEER MATS (Carpet-Bonded Foam)

- **What they are:** Large, roll-out mats made of dense, cross-linked polyethylene foam topped with a durable carpet surface.
- **Application in Circus/Acrobatics:** They serve as the main floor surface. The carpeted top provides the grip and traction needed for running tumbling passes, round-offs, and handsprings without slipping. In adagio or partner acrobatics, they give bases and flyers a stable, cushioned area to execute dynamic throws, balances, and catches.



2. TUMBLING MATS & FOLDING PADS

- **What they are:** Vinyl-covered polyurethane or crosslink foam mats that are usually 1.5 to 4 inches thick. They are segmented into 2-foot panels, allowing them to fold into blocks or stack for varied uses.
- **Application in Circus/Acrobatics:** These are versatile training tools.

- **Skill Building:** They are often folded and used as "cheeses" or wedges to help acrobats learn back handsprings or back tucks.
- **Elevated Training:** Instructors frequently stack and fold them under balancing apparatus—such as rola bola, tightwires, or handstand canes—so performers can practice dismounts safely without risking a hard floor landing.

3. CRASH MATS & CRASH PADS

- **What they are:** Exceptionally thick (usually 8 to 12 inches or more) landing pads with a soft, high-density foam core. Many feature mesh sides to release air quickly upon impact for a gentle landing.
- **Application in Circus/Acrobatics:** These act as ultimate safety nets.
 - **Aerial Arts:** Placed directly underneath aerial silks, trapeze, lyra (aerial hoop), and Chinese poles. They are practically mandatory when artists are learning new drops, releasing from the apparatus, or performing high up.
 - **Dynamic Acrobatics:** Positioned beneath human pyramids, banquine, or teeterboard acts so that flyers or porters can train with the peace of mind that a mistimed catch or fall will be safely cushioned.



QUESTION: How often is the equipment inspected?

ANSWER: The Cristiani School of Circus Arts enforces a strict three-tier inspection protocol:

1. **A visual inspection** of all aerial rigs, safety lanyards, trampoline and mats are conducted by our lead coach before every single class.
 2. **A logged component-by-component** deep inspection is done monthly.
 3. **All fabrics and soft goods are retired and replaced** on a strict timeline based on hours of use, regardless of visible wear.
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