

1. Types of Energy Absorbers:

● Type 1 Energy Absorber:

- **Free-Fall Distance:** Limited to a maximum of 1.8 meters.
- **Arresting Force:** Designed to limit the maximum arresting force to 4.0 kN during a fall.
- **Usage Context:** Suitable for environments where falls are less likely to exceed this distance, providing adequate safety without excessive force on the user.
- **Applications:** Commonly used in scenarios where the risk of falling is minimal or controlled, such as in certain construction or maintenance tasks.

● Type 2 Energy Absorber:

- **Free-Fall Distance:** Can accommodate a maximum free-fall distance of 4.0 meters.
- **Arresting Force:** Limits the maximum arresting force to 6.0 kN.
- **Usage Context:** Appropriate for situations where the potential for longer falls exists, ensuring that the forces experienced by the user remain within safe limits.
- **Applications:** Often used in more hazardous environments, such as high-rise construction or industrial settings where workers may be exposed to greater fall risks.

2. Maximum Total Mass:

- **Weight Limit:** The standard specifies that the total mass for single-person use of lanyards and energy absorbers must not exceed 100 kg.
 - **Components of Total Mass:**
 - **User's Weight:** The weight of the individual using the fall protection system.
 - **Additional Equipment:** Any tools, gear, or personal protective equipment (PPE) that the user may carry.
 - **Safety Implications:** Exceeding this weight limit could compromise the effectiveness of the fall protection system, potentially leading to increased risk of injury during a fall.
 - **Manufacturer Consultation:** Users whose total mass exceeds 100 kg are advised to consult the equipment manufacturer for guidance on the suitability of the equipment and any necessary additional testing.

3. Future International Standard:

- **Reference to ISO 10333-6:**

- **Scope:** This future standard is expected to cover broader aspects of Personal Fall Arrest Systems (PFAS), beyond just lanyards and energy absorbers.
- **Content Expectations:** It may include specifications related to the design, use, maintenance, and overall safety of PFAS.
- **Importance:** The development of this standard reflects ongoing efforts to enhance safety protocols and ensure that fall protection systems are effective and reliable.
- **Bibliography Mention:** The reference to ISO 10333-6 in the Bibliography section indicates that it is part of a series of standards aimed at improving safety in fall protection.