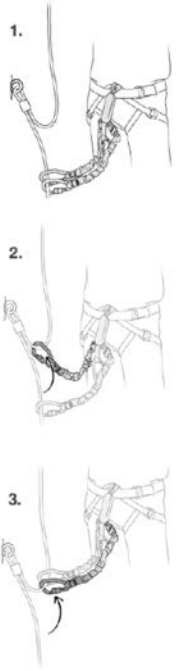




Via Ferrata Installation  
USFS Lands

ad·ven·ture part·ners®  
attractions

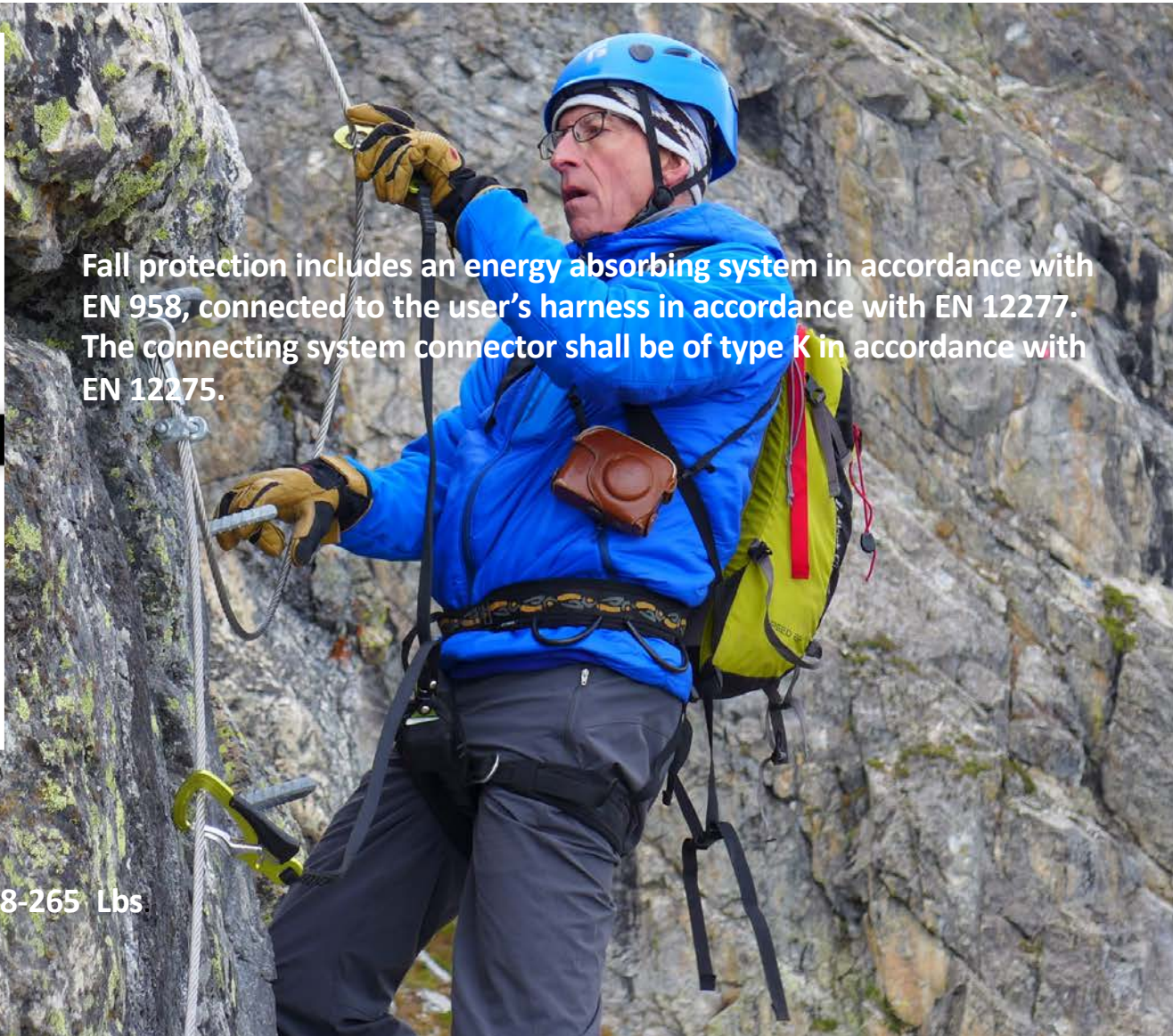
**HOW A VIA FERRATA LANYARD WORKS**



Fall protection includes an energy absorbing system in accordance with EN 958, connected to the user's harness in accordance with EN 12277. The connecting system connector shall be of type K in accordance with EN 12275.



88-265 Lbs



This standard is resold by ANSI, American National Standards Institute, Date 5/10/2018.

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

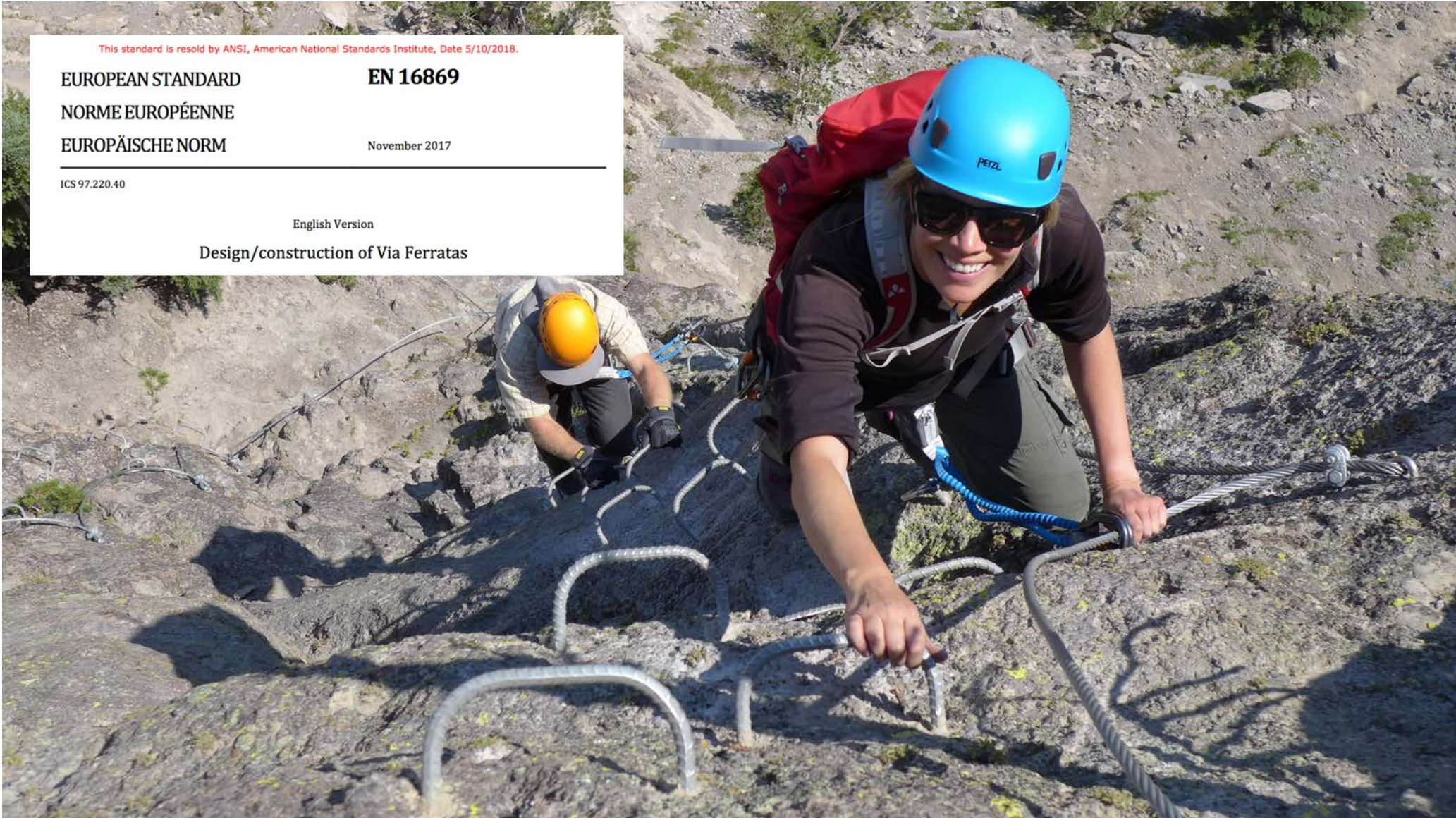
**EN 16869**

November 2017

ICS 97.220.40

English Version

**Design/construction of Via Ferratas**





Designation: F2959 – 18

## Standard Practice for Aerial Adventure Courses<sup>1</sup>

1.2 This practice applies to the following devices when operated for concession or commercial recreation:

1.2.1 Zip Lines.

1.2.2 Ropes Courses.

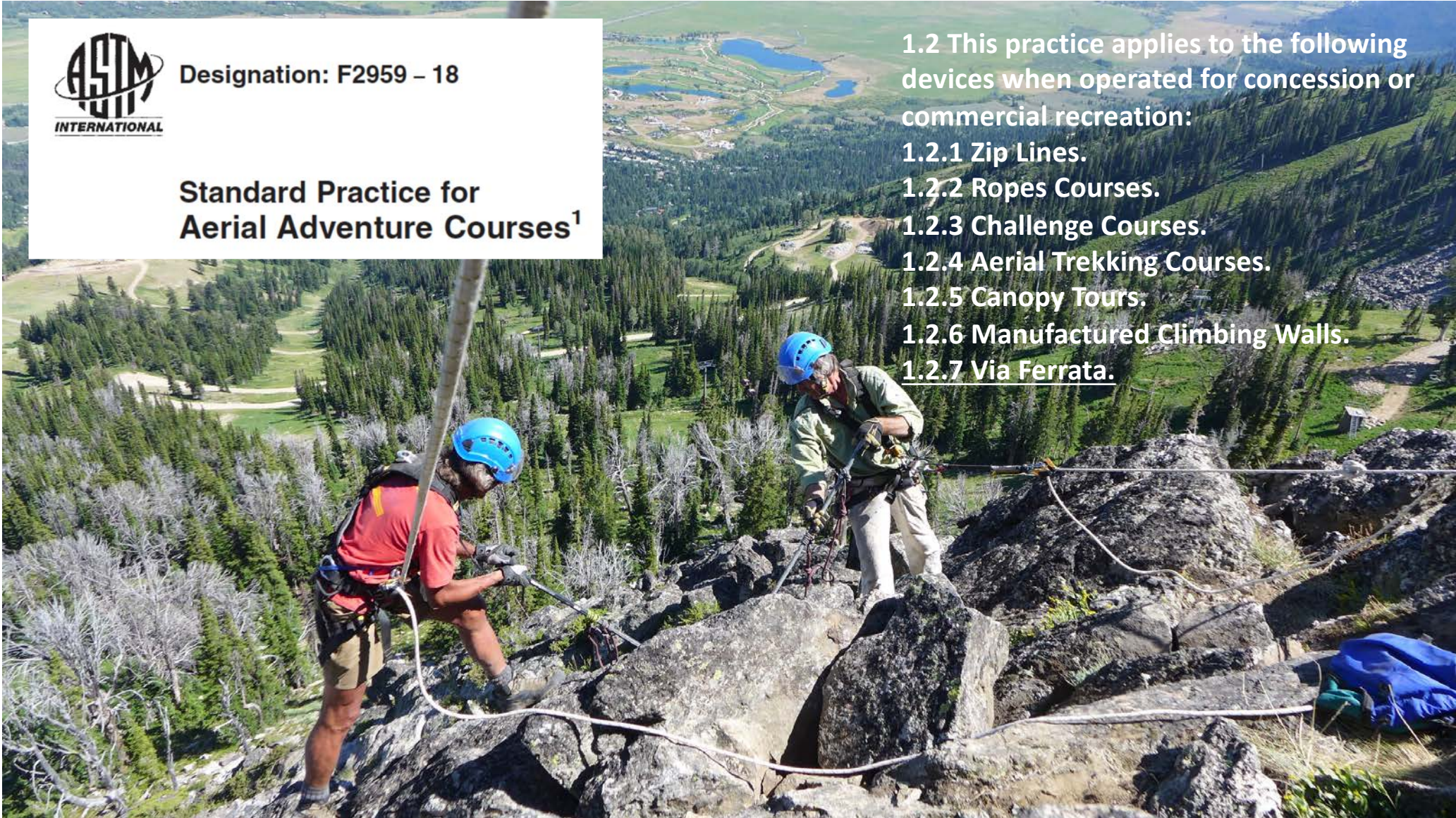
1.2.3 Challenge Courses.

1.2.4 Aerial Trekking Courses.

1.2.5 Canopy Tours.

1.2.6 Manufactured Climbing Walls.

1.2.7 Via Ferrata.



## Via Ferrata Development (USFS Lands)

- Site Survey, Preliminary Design & Budgeting
- USFS/ Resort Master Plan Amendment to include via ferrata development.
- NEPA Scoping & Approval of Proposed Installation
- Installation Contract and Engineering Standards & Specifications (ASTM & CEN Compliant, State Engineering Stamp)
- **USFS Authorization for Construction, Regional Engineer**
- Installation
- Operation, Maintenance and Inspection Plan Development
- Training (Guiding Techniques, Evacuation, Maintenance)
- Testing, Commissioning, USFS Operational Approval



## HIGHLIGHTS

- **Forest Service has incorporated Via Ferratta into FSM 7330 – Aerial Adventure Courses and Natural Resource-Based Recreation Facilities.**
- **Qualified Engineer shall verify that applicable design, quality, manufacturing, construction, operations, maintenance, inspection, testing, and auditing programs as detailed in the associated documents are in accordance with applicable ASTM F2959- 18 requirements.**
- **A Certification of Design letter from the Qualified Engineer shall be submitted verifying the design of the Via Ferrata elements, including aerial walkways are in compliance with applicable design standards being referenced (i.e. EN 16869 Design/Construction of Via Ferrata, ASTM F2959).**
- **Strength testing for anchors and progression aids in natural rock shall at a minimum be tested in similar rock to reproduce the configuration of the expected loads, safety line, anchor, bracing, glue, depth of anchorage, etc.**
- **Aerial Adventure Course Analysis per ASTM F24, F2959-18.**
- **Coordination plan with snow safety control personnel and equipment to ensure Via Ferrata and aerial walkway elements are not exposed to damage from explosives and avalanche run out zone and/or debris.**
- **Annual maintenance and inspections procedures to be conducted by qualified persons shall be included for progression aids, safety anchors and aerial walkways to determine that design integrity is maintained.**



- Topography/ Culture
- Imagination
- Engineering
- Flow
- Guides

