# PROOF LOAD TESTING VALUES

Proof load testing ratings must be applied during the installation of lifeline systems. Ensuring that these ratings are correctly followed is critical to maintaining the integrity of the system and ensuring user safety.

- **Proof Load Testing of Cable Terminations – 6kN:**
  - During the installation of a lifeline system, cable terminations must undergo a 6kN proof load test. This test ensures that the cable termination assemblies are structurally sound and will not slip or disengage under load. The test helps verify that the swaged or mechanically fastened cable terminations meet the required strength criteria and can withstand the forces exerted in the event of a fall.
  - It is important to note that this test does not simulate a fall arrest load but rather confirms the strength of the connection under a controlled test load. If a termination fails during this test, corrective actions must be taken, such as re-swaging, replacing components, or re-evaluating the termination method before the system is put into service.
- **Proof Load Testing of Anchor Posts on Metal Roof Sheets – 1kN:**
  - Anchor posts installed on metal roof sheets should be subjected to a 1kN proof load test to ensure all fasteners (such as rivets, screws, or bolts) securing the anchor post to the roof structure are properly installed and tightened.
  - The anchor post is securely attached and does not exhibit excessive movement or deformation under load.
  - Unlike the cable termination test, this test is designed to check the installation quality rather than the full strength of the anchor.
  - Applying a higher test load than 1kN is not recommended as it could damage the roof sheet or compromise the integrity of the anchor's attachment.
- **Importance of Adhering to Recommended Test Loads:**
  - The load values specified above are set by the manufacturer based on engineering calculations and testing.
  - Exceeding these values during proof load testing is strongly discouraged for the following reasons:
    - Potential Damage to Internal Components:
    - Some lifeline systems include shock absorbers or energy-dissipating elements that could be compromised if subjected to excessive force.
  - Risk to the Supporting Structure:
    - Applying excessive proof loads could cause deformation, loosening of fasteners, or even structural damage to the installation surface.
  - Compromised System Integrity:
    - If internal components or anchor points are weakened during installation due to excessive loading, the system may not function as intended in a real fall scenario.

By following the manufacturer's recommended proof load ratings, it ensures that the lifeline system remains safe, functional, and compliant with industry standards.