

Anchorage Strength Requirements

Description

Anchorage strength requirements are dependent on each type of application. Below are anchorage strength requirements for specific applications.

Fall Arrest

The structure to which a personal fall arrest system is attached must sustain static loads applied in the directions permitted by the fall arrest system of at least: 5,000 lbs for non-certified anchorages, or two times the maximum arresting force for certified anchorages (designed by qualified person). See ANSI Z359.2. When more than one personal fall arrest system is attached to an anchorage, the strengths stated above must be multiplied by the number of personal fall arrest systems attached to the anchorage. OSHA 1926.500 and 1910.140: Anchorages used for attachment of a personal fall arrest system must be independent of any anchorage being used to support or suspend platforms, and must support at least 5,000 lbs per user attached; or be designed, installed, and used as part of a complete personal fall arrest system that maintains a safety factor of at least two, and that is supervised by a qualified person.

Restraint/Travel Restraint

The structure to which a restraint system is attached must sustain static loads applied in the directions permitted by the restraint system of at least 1,000 lbs for non-certified anchorages, or two times the foreseeable force for certified anchorages. See ANSI Z359.2. When more than one restraint system is attached to an anchorage, the strengths stated above must be multiplied by the number of restraint systems attached to the anchorage.

Positioning/Work Positioning

The structure to which a work positioning system is attached must sustain static loads applied in the directions permitted by the work positioning system of at least 3,000 lbs, or twice the potential impact load, whichever is greater. See OSHA 1926.502. ANSI Z359.2: 3,000 lbs for non-certified anchorages or two times the foreseeable force for certified anchorages. When more than one work positioning system is attached to an anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage.

Rescue

The structure to which a rescue system is attached must sustain static loads applied in the directions permitted by the rescue system of at least 3,000 lbs for non-certified anchorages, or five times the applied load for certified anchorages. When more than one rescue system is attached to an anchorage, the strengths stated above must be multiplied by the number of rescue systems attached to the anchorage (re: ANSI Z359.2).

3M Personal Safety Division

Fall Protection System	Certified Anchor	Non-Certified Anchor	As Defined by
Fall Arrest	2 times maximum arresting force	5,000 lbs	OSHA, ANSI
Work Positioning	2 times foreseeable force	3,000 lbs	OSHA, ANSI
Fall Restraint	2 times foreseeable force	1,000 lbs	ANSI
Rescue	5 times applied load	3,000 lbs	ANSI
Horizontal Lifeline	2 times maximum line load	Not Applicable	OSHA, ANSI

(i) IMPORTANT NOTE

Refer to the 3M User Instructions provided with your product for additional information.

3M Personal Safety Division 3M Fall Protection Business 3833 SALA Way Red Wing, MN 55066 3M PSD products are for occupational use only.

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