



SUPER ANCHOR SAFETY®

D-Minus™ US Pat. 8746402

Instruction Specification Manual 2024

ENGLISH
VERSION

!WARNING TO USER!

You are required to read and use the Instruction/ Specification manual supplied at the time this device was shipped. Improper use and installation can result in serious injury or death. Follow inspection requirements before each use.

Materials Specification

No.1075: 11 gauge powder coated steel.

No. 1075-S: 11ga 430sst

Min. Breaking Strength: 5,000lb(22kN)

Max. Arrest Force: 3,600lb(16kN)

Specification of Use

- 1 person fall arrest or fall restraint.
- Max. body weight 310lb including tools and equipment.
- Max. slope 12/12
- Do not use for work positioning HLL systems, hoisting or lifting.

Compliance

OSHA 1926.502/ANSI Z359.18-17 Type D

SAS = Super Anchor Safety.

Qualified or Competent Person

See OSHA definition.

**EOR = Engineer of Record*

Anchor Locations/Service Zones

Required to be specified by the project EOR* or qualified person*. See Fig.7 example.

Framing Requirements

Install onto top chords capable of supporting 5,000lb or 2 times the "intended fall protection load" per/OSHA 1926.502(d)(15)(i)(ii). Fall Protection Load: Max. fall arrest force 1,800lb times 2 = a max. in plane load of 3,600lb applied to a top chord or supporting structure. Engineering required by the project EOR* or qualified person*. Install anchors below the hip or ridge as shown at Fig.7 with the connector hole pointing in the slope direction. See Figs.3,4.

Installation/Fastener Specifications

Position leg centering holes over the top chord center as shown at Figs.3,4 with 6ea **SAS** factory supplied fasteners specified at Table 1. Do not substitute with other mfg. fasteners. Visually inspect installation prior to use and do not use anchors if blow outs are present or fasteners are thru sheathing only. See Figs.5,6.

Fig.2

1075-S D-Minus
11ga 430sst

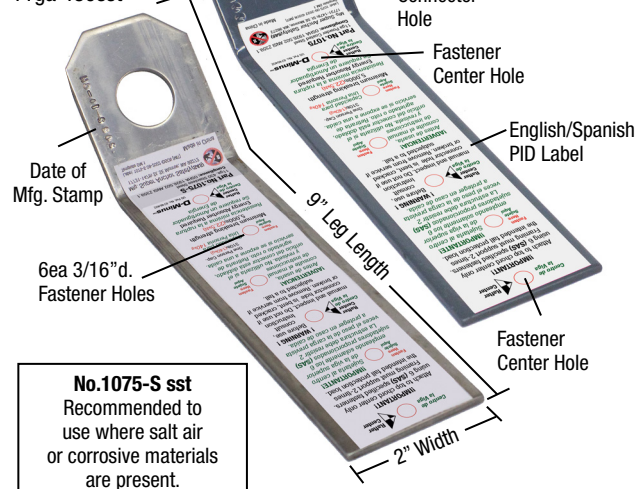


Fig.1

1075 D-Minus
11ga Powder Coated Steel

7/8" d.
Connector
Hole
Fastener
Center Hole

English/Spanish
PID Label

9" Leg Length

6ea 3/16" d.
Fastener Holes

Fastener
Center Hole

No.1075-S sst
Recommended to
use where salt air
or corrosive materials
are present.

Fig.3

Permanent Installation
No.2013 Spiral Shank Nails or
No.2045-3.5 Bugle Head Screws

Fig.4

Temporary Installation
No.2012-A 16d
Duplex Nails

Sheathing
required
before use
for fall
protection.

Direction
of Slope

Min. 2x4
Top Chord

Fastener Center
Hole Positioned Over
Top Chord Center

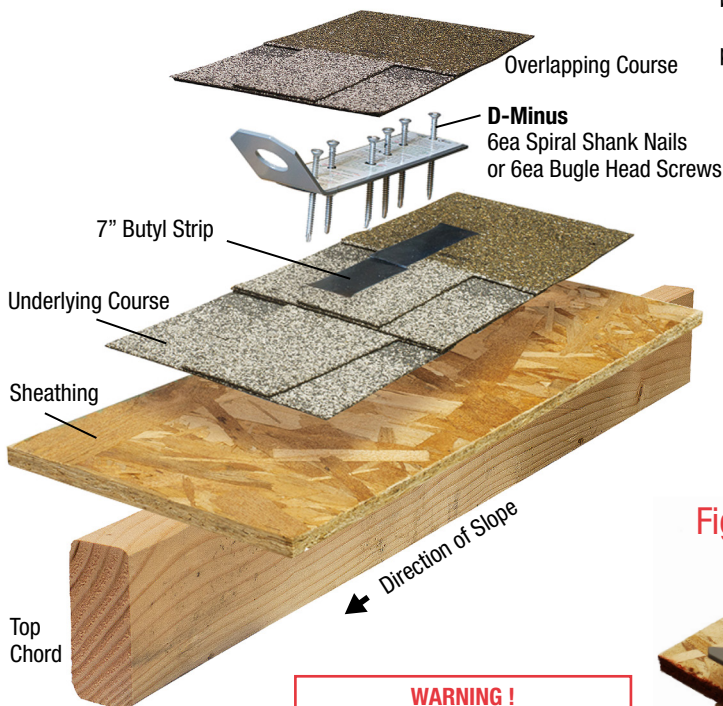
Top Chord Center

Visual Inspection Required Before Use

Inspect underside of framing and verify
no blow outs or fasteners visible thru sheathing.

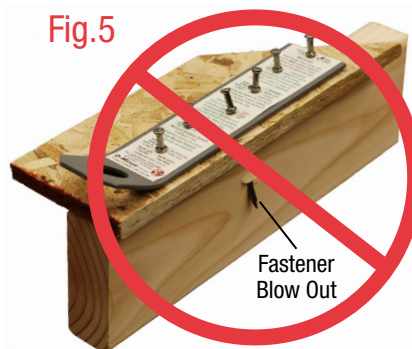
Fig.7

Permanent Installation



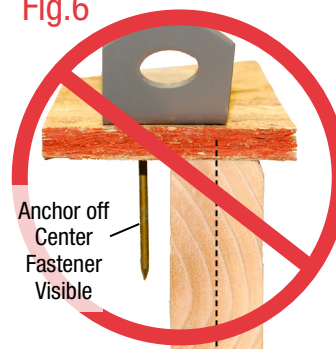
Do Not Use if Blow Outs are Visible.

Fig.5



Do Not Use if Fasteners are
Visible Thru Sheathing.

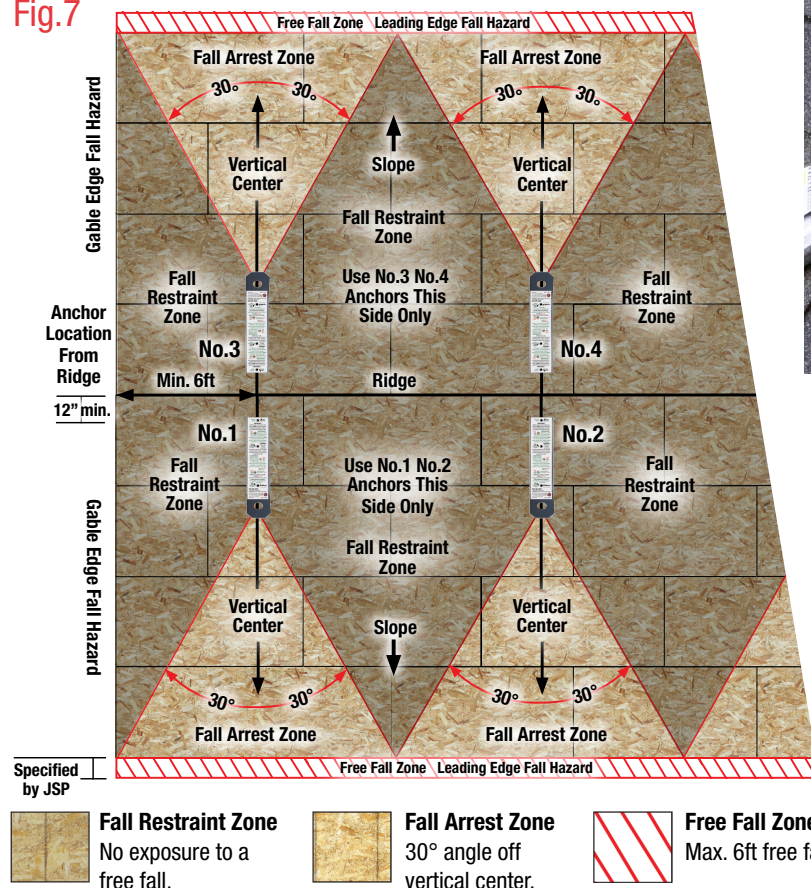
Fig.6



WARNING !
Defective Installations
Figs.5,6 remove anchor and
install in a different location.
Report visual inspection failures
to project safety personnel.

Fall Protection Service Zones

Fig.7 is an example of a typical anchor layout based on 30° fall arrest service zones and the anchors fastener strength. Anchor locations and spacing are determined by the rafter length and top chord location and are required to be specified by a qualified person* or project EOR*.

Fig.7**OSHA Free Fall Length**

The PPE example shown at Fig.11, requires to use the following factors to limit free falls to 6ft or less.

- Harness dorsal D-ring height above the leading edge.
- Service length of personal E/A vertical position.
- Length of lifeline slack.

Energy Absorber (E/A)

Workers are required to use an OSHA or ANSI compliant E/A.

| E/A Type | Max. Force | Avg. Force |
|----------|------------|------------|
| Personal | 1,800lb | 900lb |
| SRL-LE | 1,800lb | 1,350lb |

Fall Protection Systems/Definitions**Fall Arrest OSHA 1910.140**

"A system used to arrest an employee in a fall from a walking-working surface."

Fall Restraint OSHA 1926.751

"A means of fall protection that prevents the user from falling any distance."

Qualified Person OSHA 1910.140

"one who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve problems relating to the subject matter, work or project."

**Fig.11**
PPE Equipment**Table 1 SAS Fasteners**

| Part No. | Type |
|----------|--------------------------|
| 2012-A | 16d Duplex Nail |
| 2013 | Spiral Shank 3" sst Nail |
| 2045-3.5 | Bugle Head 3-1/2" Screw |

WARNING! Do not use 16d sinkers or duplex nails for permanent installation.

Fig.8**Fall Arrest Service Load**

Must not exceed a 30° angle to the left or right of vertical center as shown at Fig.7.

**Fig.9****Wrong Load Direction**

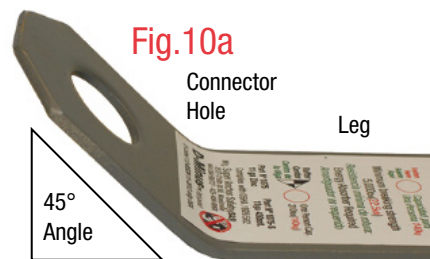
Do not reverse load anchors when exposed to a free fall.

**Job Specific Fall Protection Plan**

Project safety personnel are required to implement a job specific fall protection plan, (JSP) identifying free fall and swing fall hazards, and instructing workers to observe fall protection service zones as shown at Fig.7.

Fall Indicator

The D-Minus leg connector hole is bent at a 45° angle as shown at Fig.10a, and is designed to deform as shown at Fig.10b, when subjected to a free fall or other force.

**Fig.10a****WARNING! Deformed Anchor**

Leg is less than 45°. Remove from service and dispose of in a way that prevents further use.

Fig.10b

DO NOT RE-BEND DEFORMED ANCHORS

SAS Supplied Fasteners

16d Duplex Nail Temporary Use



3" Length

Spiral Shank sst Nail Permanent Use



Bugle Head sst Screw Permanent Use



3-1/2" Length