

The Travflex® 2 has been specially designed for sheet metal or concrete roofs. Every user must wear shock absorbing lanyard with maximum arrest force of 900 lb. (4 kN).

The Travflex® 2 is a single-cable horizontal lifeline system that is easy to install and can allow up to two users. The system is installed on custom interface plates when installed on roof metal panels. It is a hands-free system that does not require special tools for installation. The system comes with a visual tension indicator and an in-line INRS energy absorber.

The Travflex® 2 single-cable system provides a smooth travel and allows the traveler to move freely over the intermediate anchors, minimizing wear and eliminating user assistance. The user's hands remain free to accomplish whatever task is required.

#### BENEFITS

- Installation on rooftops and walls
- Roof steel panels do not distort after stopping a fall
- Traveler passes over intermediate and corner anchors with no manual manipulation
- User can work on either side of lifeline
- Eliminates risk of wire-cable clips loosening and slipping
- End and corner anchors have additional anchor points

#### FEATURES

- Controlled linear force with specially designed anchor brackets and plates
- Two INRS energy absorbers
- Uses watertight, silicone rivets with neoprene seals
- Hands-free design with better ergonomics
- Wedge socket cable adjustment system
- Copper-aluminum anchors prevent fusing of the wire rope and allow the rope to slide through anchors effectively
- No need to dismantle the entire lifeline in the event of a fall, individual components can be replaced.
- Up to 50 ft. (15 m) spans between brackets

#### APPLICATIONS

- Building maintenance (rooftops without guardrails or parapets)
- Oil and gas installations
- Distribution facilities
- Industrial plants
- Rooftops or enclosures in concrete or metal panels
- Flat or sloped surfaces up to 15° inclination (only straight-line installation is available for wall-mount applications.)

#### APPLICABLE STANDARDS

- OSHA 1910, subpart D: Walking and working surfaces
- OSHA 1926, subpart M: Fall protection
- ANSI Z359.6-2016: Specifications and design requirements for active fall protection systems
- ANSI A10.32-2012: Personal fall protection used in construction and demolition operations
- CSA Z259.16-21: Design of active fall protection systems

#### COMPATIBLE PERSONAL FALL PROTECTION EQUIPMENT ALSO REQUIRED

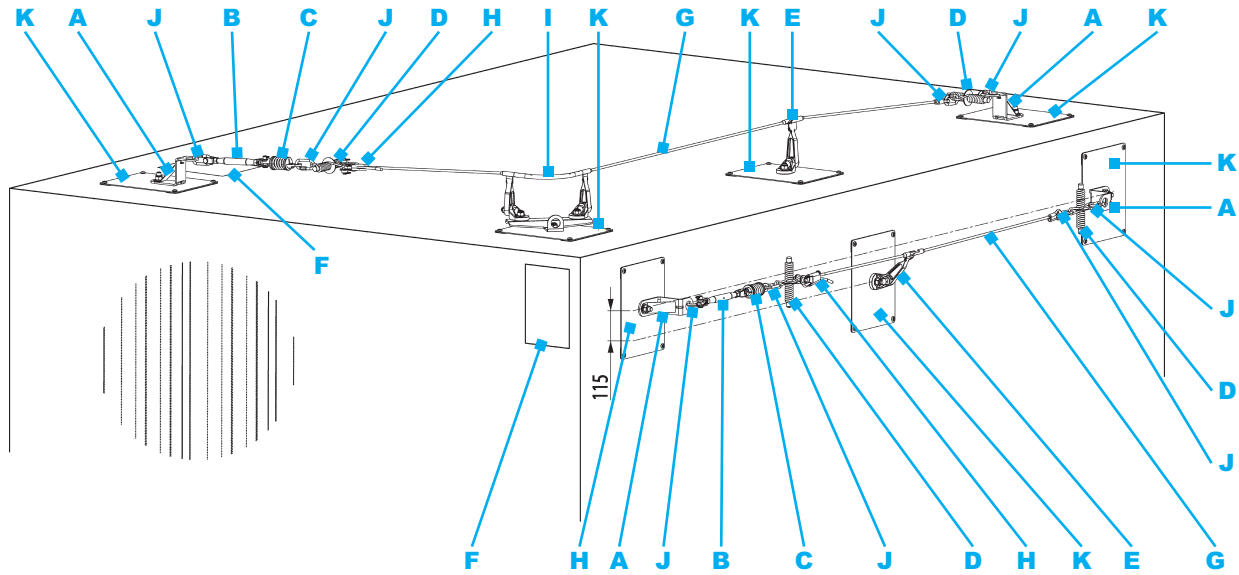
- Full-body harness
- Shock-absorbing lanyard or self-retracting device
- Mounting supports and bolts compatible to the breaking strength of components.

#### ⚠ WARNING

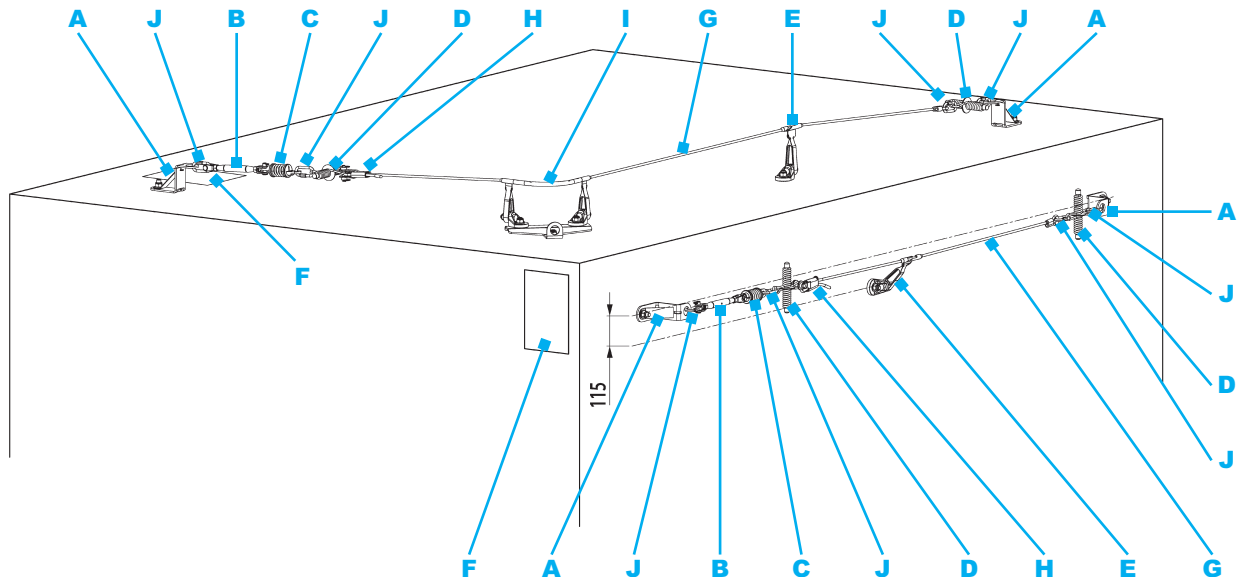
- When using a horizontal lifeline as a fall arrest system, it must be ensured that there is enough space below the walking/working surface as not to hit anything in case of a fall. Tractel® can assist with determining deflection.
- The Travflex® 2 horizontal lifeline system is an engineered designed system. This means that before any installation commences, a specific technical study of the site must be undertaken. This would include a shop drawing showing the system layout, general notes, connection details and expected loading. These shop drawings are to be reviewed by a professional engineer licensed to work in the state or province that the project is in. A site survey may be required if drawings are not available to use when preparing the shop drawing. The shop drawings will also show the total fall height required if the system is designed for fall arrest. Tractel® can assist with system loading.

## TRAVFLEX® 2 COMPONENTS

### INSTALLATION ON ROOF METAL PANELS



### INSTALLATION ON CONCRETE



- A. End anchor
- B. Turnbuckle tensioner
- C. Tension indicator
- D. INRS energy absorber

- E. Intermediate anchor
- F. Information plate
- G. Wire rope
- H. Wedge socket

- I. Corner kit
- J. Quick-link connector
- K. Interface plate
- Not shown: Traveler

### END ANCHOR

- Galvanized steel – J30100378
- Stainless steel – J30100388

The end anchor has an integrated fall indicator. It is designed to be attached to the supporting structure with a screw or a ½ in. bolt. The unfolding of the fall indicator minimizes the efforts on the host structure and contributes to the energy absorption of the fall arrest.

- Material: Galvanized or stainless steel
- Minimum breaking strength: 30 kN (6,744 lbs.)
- Size: 8 x 2.36 x 4.21 in. (209 x 60 x 107 mm)
- Net weight for the complete anchor: 1.93 lbs. (850 g)

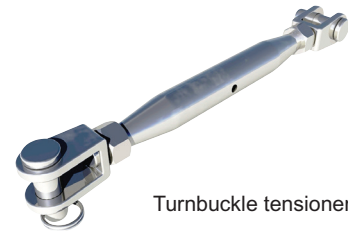


End anchor

### TURNBUCKLE TENSIONER – J3640742

The tensioner enables adjustment of the wire rope tension to the required value.

- Material: Stainless steel – 316L
- Minimum breaking strength: 6,744 lb. (30 kN)
- Extends from 10 to 16 in. (270 to 400 mm)
- Net weight: 1.3 lb. (580 g)



Turnbuckle tensioner

### TENSION INDICATOR – J3666858

The tension indicator gives a visible conformation that the rope tension is set to the correct value of 224 lb. (100 daN). Proper wire rope tension ensures correct operation of system components in the event of a fall.

- Material: Stainless steel – 316L
- Size: 5.7 x 2 in. (144 x 50 mm)
- Minimum breaking strength: 6,744 lb. (30 kN)
- Net weight: 2 lb. (900 g)

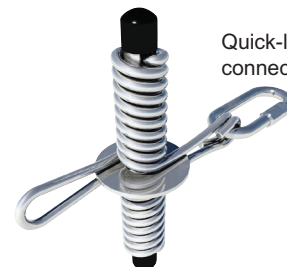


Tension indicator

### INRS ENERGY ABSORBER – J3666688

The INRS energy absorber is designed to dissipate the energy transmitted to the supporting structure by the fall of a user connected to the system. It is disposable (used once). It does not negate the necessity of equipping every user with personal fall arrest equipment. Each INRS energy absorber is supplied with a quick-link connector.

- Material: Stainless steel – 304L
- Size: 7.5 x 4.3 in. (190 x 110 mm)
- Minimum breaking strength: 6,744 lb. (30 kN)
- Net weight: 0.9 lb. (400 g)
- Quick-link connector: Stainless steel – 316L
- See performance certificate
- Maximum arrest force: 600 daN (1,350 lb.)
- Average dynamic pull out: 500 daN (1,124 lb.)
- Maximum deployment: 905 mm (35.63 in.)
- Maximum deployment: 905 mm (35.63 in.)



Shock absorber

Quick-link connector

**INTERMEDIATE ANCHOR – J30100398**

With its original design, the Travflex® 2 intermediate anchor allows each user to easily pass through the anchor point without the need to disconnect from the system. The intermediate anchors must be set up so that the maximum interval between anchors, from one end of the system to the other, never exceeds 50 ft. (15 m).

The intermediate anchors are formed by four parts:

1. An intermediate anchor
  2. A mounting bracket
  3. A HM16 x 55 mm (5/8 x 2¼ in.) bolt
  4. A locknut
- Material: copper-aluminum (anchor) and stainless steel (hardware)
  - Net weight: 2.55 lbs. (1,160 g)

*Copper-aluminum prevents fusing of the wire rope and allows it to slide through the anchors effectively.*

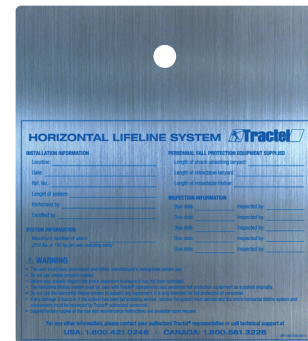


Intermediate anchor

**INFORMATION PLATE – JNP1**

Comes with a mounting bolt hole for a ½ in. (12 mm) fastener.

- Size: 7½ x 8½ in. (190 x 216 mm)



Information plate

**WIRE ROPE**

- Galvanized steel – J37009000
- Stainless steel – J37009000S

This makes up the retaining cable, which is sleeved, looped and fitted with a thimble at one end. The other end is brazed and ground smooth in the factory. It is available in stainless steel or galvanized.

- 5/16 in. (8 mm) diameter



Wire rope cable

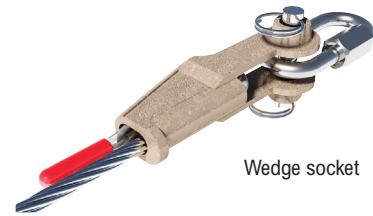
### WEDGE SOCKET – J30193837

The wedge socket is formed by five (5) parts:

1. A casing
2. A wedge
3. A securing pin
4. Two (2) split rings to lock the securing pin to the casing

The wedge socket is used to secure the free end of the wire rope to the energy absorber.

- Material: copper-aluminum and stainless steel
- Minimum breaking strength: 6,744 lbs. (30 kN) when used with Tractel® specified wire rope.
- Net weight: 0.9 lb. (430 g)



Wedge socket

### CORNER KITS FOR METAL ROOF PANELS

- Galvanized steel – J30100408
- Stainless steel – J30100418

### CORNER KITS FOR CONCRETE SURFACE

- Galvanized steel – J30100618
- Stainless steel – J30100628

This sub-assembly is only used when the system has corners with a standard opening of between 85° and 95°. Each corner kit acts as an intermediate anchor. The kits are supplied for assembly by the installer only for horizontal or sloped rooftops (only straight-line installation is available for wall-mount applications).

Corner kits are comprised from eight parts:

For installation on metal panels:

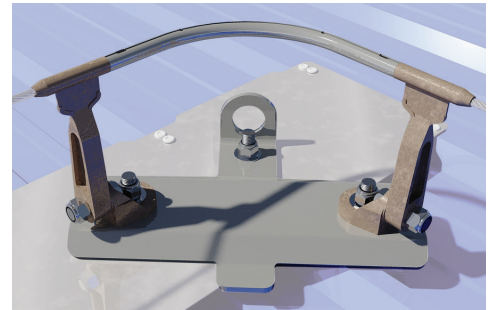
1. Two corner anchors
2. Two mounting brackets
3. Two HM16 x 45 mm ( $\frac{5}{8}$  x 1 $\frac{3}{4}$  in.) bolts
4. Two HM16 x 55 mm ( $\frac{5}{8}$  x 2 $\frac{1}{4}$  in.) bolts
5. Four locknuts
6. Four washers
7. Corner tube
8. One corner base plate\*\*

- Material: copper-aluminum and galvanized or stainless steel
- Net weight: 10.31 lbs. (4,680 g)

\*For corner installation with angle greater than 95°, contact Tractel®.

\*\* The corner base plate is available with a guide pin only when installed on interface plates.

Note: the corner tube is supplied straight; the installer shapes the tube by hand to adapt it to the desired turn angle between 85° and 95°. Once shaped, it must be approved before use.



Corner kit

### TRAVELER – J30251349

The traveler slides along the wire rope and moves hands free.

Important: the Travflex® 2 traveler is the only means for connecting a user to the Travflex® 2 system.

- Material: Martensitic stainless steel grade 431
- Net weight: 1.45 lb. (658 g)



Traveler

### CARABINER – PM11Z

The carabiner is used only to connect the user's lanyard to the Travflex® 2 traveler.

- Material: Alloy steel
- Opening: ¾ in. (19 mm) opening
- Size: 4.2 x 2.4 in. (107 x 60 mm)
- Net weight: 0.4 lb. (202 g)



Carabiner

### INTERFACE PLATE FOR END AND INTERMEDIATE ANCHORS

- Galvanized steel
- Stainless steel

### INTERFACE PLATE FOR CORNER KITS

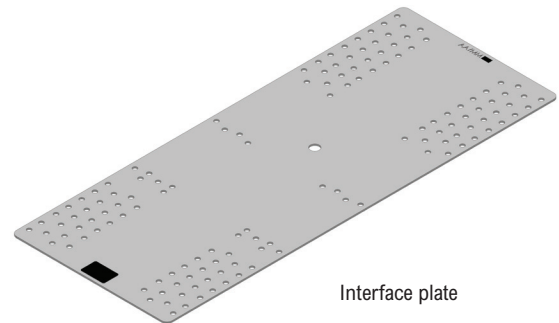
- Galvanized steel
- Stainless steel

Designed to hold the end, intermediate and corner anchors for installation on metal panels.

Each interface plate includes:

- One stainless steel HM16 (5/8 in.) bolt
- Two stainless steel HM16 (5/8 in.) washers
- One locknut
- Rubber foam seals, number per plate type
- 7 mm aluminum rivets, number per plate type
- Stainless steel self-tapping screws, number per plate types

- Material: Stainless steel or galvanized steel
- Size: Depends on the seam metal panel
- Net weight: Depends on the seam metal panel



Interface plate

**SYSTEM LOADING AND DEFLECTION**

Contact Tractel® for system deflection and site-specific loading.

