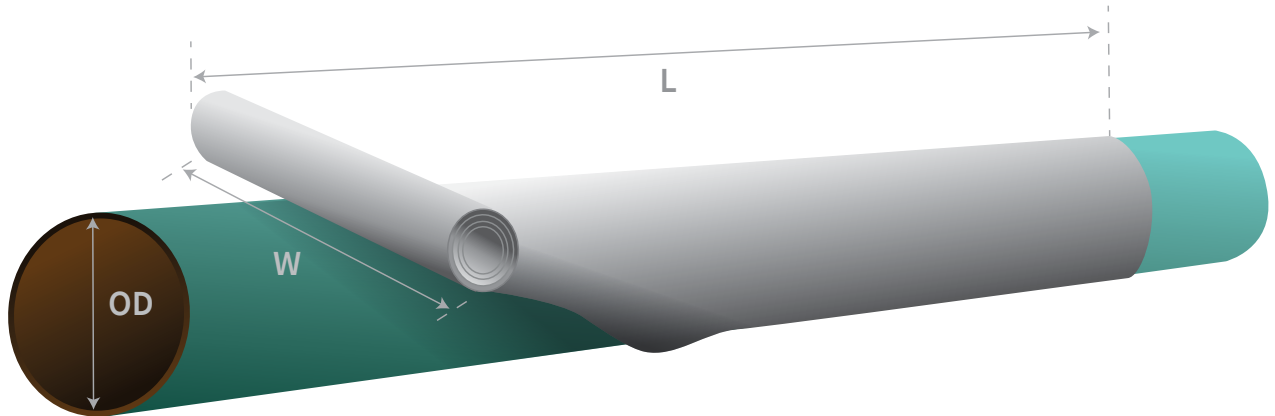


Technical Notes



PipeSak® Pipeline Products

RockStop® Rockshield Roll Installation



GENERAL

RockStop® is an engineered pipeline rockshield that offers best-in-class impact and puncture resistance against rocky backfilling operations and long-term abrasion, while not impeding cathodic protection (CP).

RockStop® is manufactured from polypropylene and polyester fibers, making it one of the lightest weight rockshields on the market today.

Soft and flexible in all weather conditions, RockStop® can be installed in a fraction of the time of traditional rockshields, saving your project time and money.

RockStop® has multiple quick and easy installation methods, making it a versatile product to fit the needs of contractors and owning companies alike.

RockStop® does not shield cathodic protection and offers protection for the life of the pipeline.

RockStop® Dimensional Data

Pipe (OD) in (mm)	Roll Width (W) in (mm)	Roll Length (L) ft (m)	Roll Square Footage ft² (m²)
4.5 (114)	20 (508)	50 (15.2)	83.33 (7.7)
6.625 (168)	27 (785.8)	50 (15.2)	112.5 (10.5)
8.625 (219)	33 (838.2)	50 (15.2)	137.5 (12.8)
10.75 (273)	40 (1,016)	50 (15.2)	166.67 (15.5)
12.75 (323)	46 (1,168.4)	50 (15.2)	191.67 (17.8)
16 (406)	57 (1,447.8)	50 (15.2)	237.5 (22.1)
20 (508)	70 (1,778)	50 (15.2)	291.67 (27.1)
24 (609)	84 (2,134)	141 (43)	987 (91.7)
30 (762)	101 (2,565)	141 (43)	1,186.8 (110.3)
36 (914)	120 (3,048)	141 (43)	1,410 (131)
42 (1,067)	140 (3,556)	141 (43)	1,645 (152.8)
48 (1,219)	160 (4,064)	141 (43)	1,880 (174.7)

*Master rolls available for 24" OD and above. Equipment required for installation.





RockStop® Rockshield Roll Installation

PipeSak® Pipeline Products

1. QuikStrip™ FASTENER INSTALLATION

QuikStrip™ fasteners are provided in pre-cut (perforated) lengths of 24” (61 cm), widths of 4” (10 cm), or equal covering of 96-in² (619 cm²).

- i. Drape RockStop® over the centerline of the pipe from the free end of the roll.
- ii. Roll out desired length of roll and cut with sharp safety knife.
- iii. Move one end of RockStop® to the 10 or 2 o’clock position and hold it in place.
- iv. Bring the other free end of RockStop® under the pipe and underlap with the end being held.

Note: Overlapping section of RockStop® must point downward.

- v. To use QuikStrip™, fasten half of a strip at the desired location, pulling tight before fastening the other half onto the opposite side of RockStop®.
- vi. Additional QuikStrip™ should be applied every 36” (~1 m) between fasteners.

Suggestion: Eliminate ripples/bunching of RockStop® during installation by applying a central strip first and work outward toward ends.

- vii. Connect adjacent rolls by overlapping 6” (15 cm) of RockStop®.

Suggestion: Ensure adjacent rolls overlap in a shingling manner, facing in the direction of lowering in to assist with rolling cradles.

- viii. Apply 4-8 QuikStrips™ equally spaced across the overlapping region in parallel to the pipe to connect adjacent pads.

Suggestion: Three revolutions of butyl tape or the equivalent should be used to fix the leading edge of RockStop® when using rolling cradles.





RockStop® Rockshield Roll Installation

2. SPIRAL WRAP INSTALLATION

Butyl tape can be continuously wrapped around the pipe to install RockStop®. Minimum 2” (5 cm) width required.

- i. Drape RockStop® pad over the center of the pipe. Overlap the free ends at the preferred location (10 or 2 o'clock), ensuring the overlap points downward.
- ii. Spiral wrap tape around the pipe at a maximum spacing of 18” - 24” (46 cm - 61 cm).
- iii. Connect adjacent rolls by overlapping 4” (10 cm) of RockStop® and continue to spiral wrap in the same configuration.

Suggestion: Ensure adjacent rolls overlap in a shingling manner, facing in the direction of lowering-in to assist with rolling cradles.

- iv. Three revolutions of butyl tape should be used to fix the leading edge of RockStop® when using rolling cradles.



3. RockStop® LT HEAT TOOL INSTALLATION

RockStop® can be connected by heating the overlapping region to produce a heat weld.

- i. Drape RockStop® over the pipe (QuikStrips™ can be used to temporarily hold RockStop® prior to heat welding).
- ii. Ensure the overlap points downward (located at the 10 or 2 o'clock position).
- iii. Using the RockStop® LT Heat Tool, consistently heat 24” (61 cm) of the overlapping section for 3-5 seconds.

Note: Overlapping sections are specifically dimensioned to ensure heating remains away from the pipeline coating.

- iv. Firmly apply pressure in a side-to-side motion to the overlapping region for 2-3 seconds to secure. QuikStrips™ can be lifted to allow heat weld and can be reapplied, or completely removed.
- v. Connect adjacent pads by overlapping 6” (15 cm) of RockStop® and heat weld around the circumference of the pipe. Shingling overlap should face direction of lowering in.





PipeSak® Pipeline Products

RockStop® Rockshield Storage Instructions

RockStop® ROCKSHIELD: STORAGE INSTRUCTIONS

- Maintain product packing until time of installation.
- Care should be taken when handling. Equipment forks should be routinely checked for sharp burrs and edges that may damage RockStop®.
- When storing, avoid direct contact with the ground by using appropriately sized pallets, tarp, poly, etc.
- Any damaged RockStop® should be set aside for inspection or discarded.
- Keep RockStop® dry prior to installation. Secondary tarping may be required.
- Re-cover during winter/wet installation conditions.
- Pallet covers must be replaced on partially used pallets.
- Longer term storage under secondary tarp is recommended.

RockStop® ROCKSHIELD SAFETY RECOMMENDATIONS

- Do not attempt to lift master rolls manually, only use approved spreader bars.
- Ensure all associated equipment such as spreader bars, rigging and heat welding equipment are inspected daily.
- Workers must wear appropriate PPE and be vigilant toward machinery used for installation.
- Care should be taken when using heating equipment near the pipeline coating - heat must always be applied to RockStop® - not directly to the pipe.
- Do not heat RockStop® excessively. Only use RockStop® LT Heat tool to help ensure good control and even distribution of heat.
- Other site-specific hazards should be addressed in the field-level hazard assessment.

