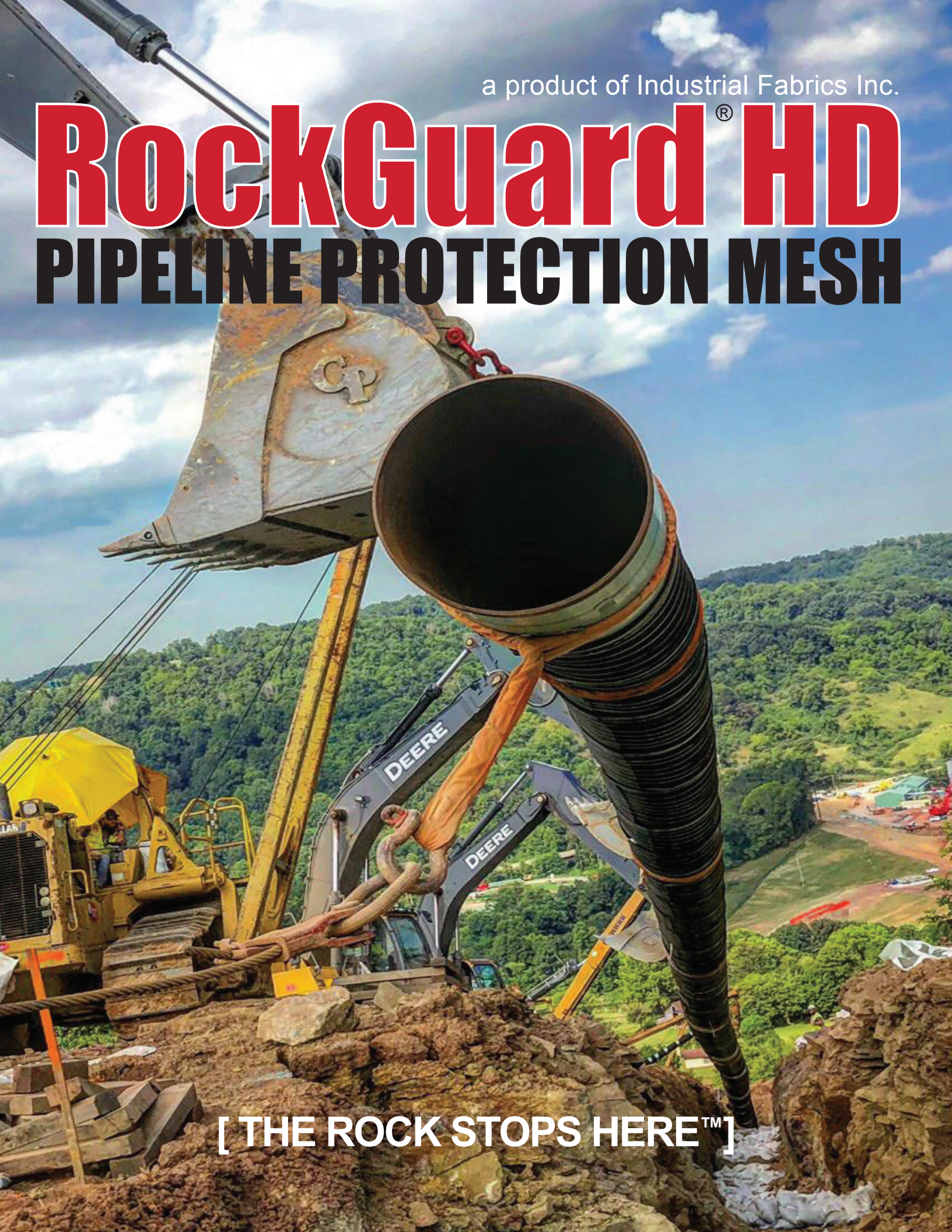


a product of Industrial Fabrics Inc.

RockGuard[®] HD

PIPELINE PROTECTION MESH



[THE ROCK STOPS HERE[™]]

Why Specify RockGuard® HD?

- Designed for ALL Regions
- Protection During & After Backfill Operations
- 11mm Consistent Thickness
- Half the Weight of Competitive Rockshields
- Designed to Allow Water to Flow Around the Pipe
- Available in Custom Roll and Pad Sizes
- Flexible Even in Cold Temps
- Fast & Easy Installation
- Shortest Lead Time Nationwide

Product Benefits

- 11mm thick (0.43")
- Provides maximum protection
- Recommended for ALL pipeline diameters
- Small aperture openings
- Excellent compressive and impact properties
- No inhibiting effect on cathodic protection
- Ergonomically correct weight

RockGuard® HD
PIPELINE PROTECTION MESH
www.rockguard.biz

Pipe Sizing Chart



ROLLS - RockGuard®HD (Heavy Duty)

Pipe Diameter	Recommended Width ¹	Roll Size Available	Approx. lbs/roll	SF/Roll
2"	13"	12" x 50' (*)	19	50
4"	21"	21" x 50'	33	87.5
6"	27"	28" x 50'	44	116.5
8"	34"	3' x 50'	57	150
10"	40"	3.5' x 50'	67	175
12"	47"	4' x 50'	76	200
16"	57"	4.75' x 50'	90	237.5
18"	63"	6' x 50'	114	300
20"	69"	6' x 50'	114	300
24"	82"	7' x 40'	106	280

(*) 4.5" circumferential overlap provided

1. Recommended Circumferential Overlap 6"
2. Recommended Pad to Pad/Roll to Roll Overlap: 2"

7' CUSTOM PADS - RockGuard®HD (Heavy Duty)

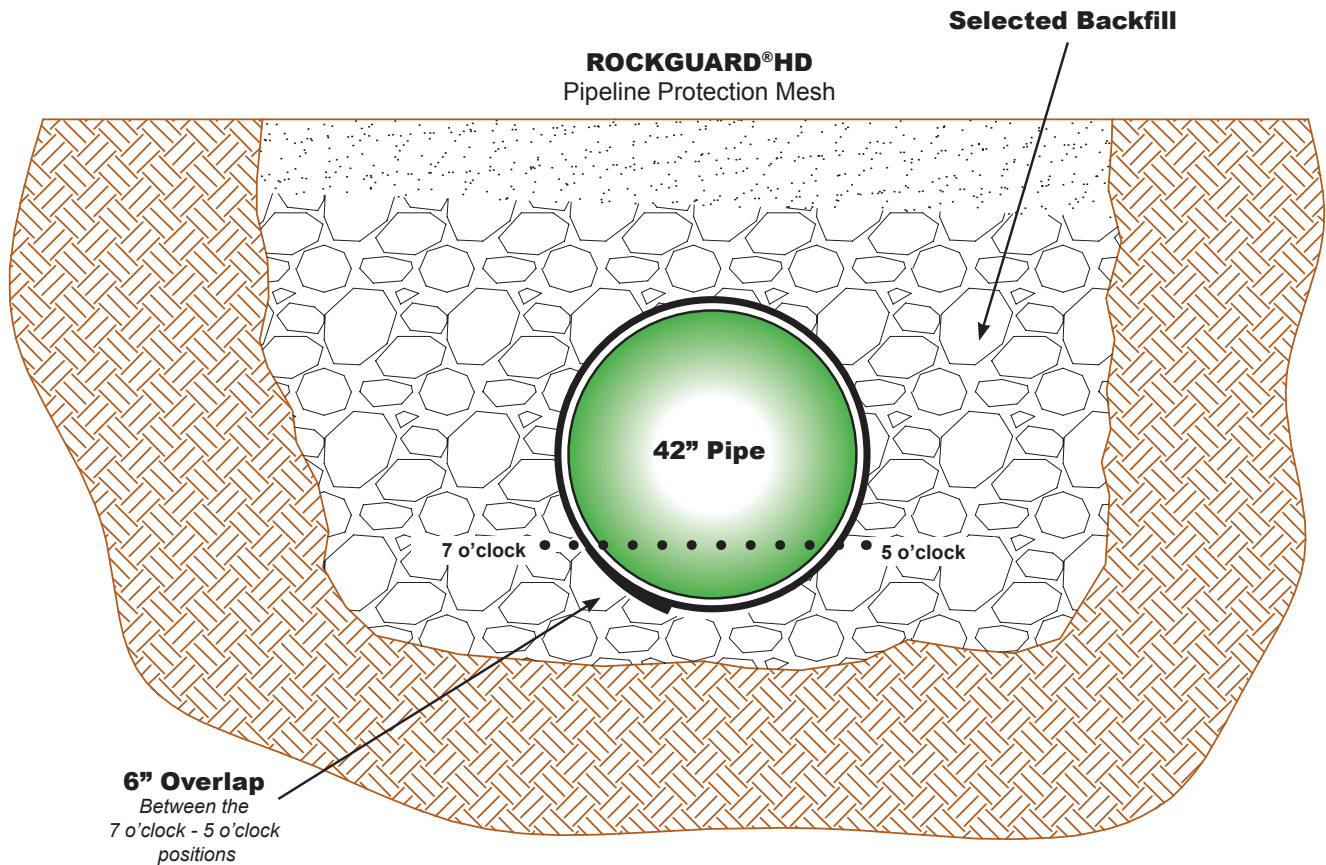
Pipe Diameter	Recommended Width ¹	Pad Size Available	Approx. lbs/pad	SF/Pad
30"	101"	8.42' x 7'	22	58.9
34"	113"	9.42' x 7'	25	65.9
36"	120"	10' x 7'	27	70.0
42"	138"	11.5' x 7'	31	80.5
48"	157"	13.08' x 7'	35	91.7

1. Recommended Circumferential Overlap 6"
2. Recommended Pad to Pad/Roll to Roll Overlap: 2"

Application



SECTION VIEW



RockGuard HD
PIPELINE PROTECTION MESH
www.rockguard.biz

All the above information is given in good faith, but the figures are typical values only and should not be taken as a guarantee of performance. Manufacturing tolerances for dimensional and technical characteristics apply and are available upon request. The company reserves the right to improve the product and adjust the specification without notice.

Installation Methods

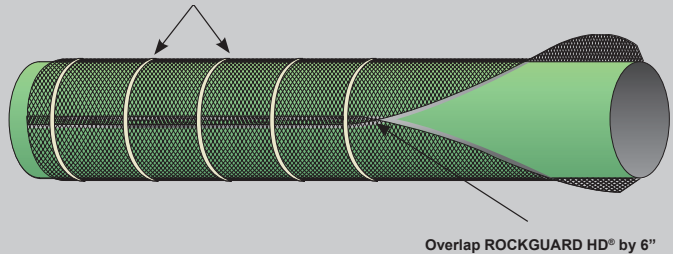
CIGARETTE / LONGITUDINAL WRAPPING

ROCKGUARD® HD can be installed along the pipe or around the pipe as per the diagrams and can be secured by means of high performance fiberglass reinforcement tape.

For pipes with a circumference of less than 6" in relation to the width of the ROCKGUARD®HD:

1. Unroll the ROCKGUARD®HD parallel to the pipe which is to be protected.
2. Place the ROCKGUARD®HD above the pipe.
3. Wrap the ROCKGUARD®HD around the pipe overlapping the edges by approximately 2".
4. Fix the ROCKGUARD®HD with high performance fiberglass reinforcement tape.
5. The mesh can be secured with high performance fiberglass reinforcement tape.

Wrap with high performance fiberglass reinforcement tape every 6"



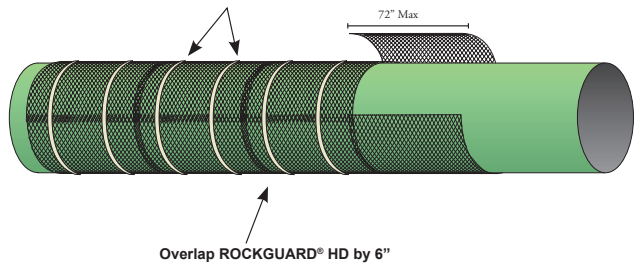
LATITUDINAL WRAPPING

ROCKGUARD® HD can be installed along the pipe or around the pipe as per the diagrams and can be secured by means of high performance fiberglass reinforcement tape.

For pipes with a larger circumference than the roll width:

1. Cut the ROCKGUARD®HD into pieces of more than 6" extra than the circumference of the pipe.
2. Place the ROCKGUARD®HD above the pipe.
3. Wrap the pipe with the ROCKGUARD®HD overlapping the adjacent installed mesh by 2".
4. Fix the ROCKGUARD®HD with high performance fiberglass reinforcement tape.
5. The mesh can be secured with high performance fiberglass reinforcement tape.

Wrap with high performance fiberglass reinforcement tape every 6"



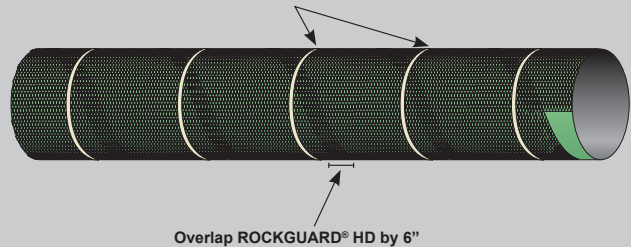
SPIRAL WRAPPING

ROCKGUARD® HD can be installed along the pipe or around the pipe as per the diagrams and can be secured by means of high performance fiberglass reinforcement tape.

This process can be applied to larger diameter pipes:

1. Place the ROCKGUARD®HD above the pipe.
2. Start wrapping the pipe moving along the length of the pipe, so that the ROCKGUARD®HD overlaps by approximately 2".
3. Use the high performance fiberglass reinforcement tape to secure the ROCKGUARD®HD in situ as the mesh is wrapped.

Wrap with high performance fiberglass reinforcement tape every 32"



Installation Detail



ROLLS:

1. All rolls should be of adequate size to cover the circumference of the pipe plus a 6" overlap.
2. **ROCKGUARD® HD** is to be placed around pipe in the shingle style, whereby placing the 6" overlap portion between the 7 and 5 o'clock position of the pipe.
3. Place all end-to-end overlaps minimum 2".
4. All rolls shall be secured using high performance fiberglass reinforcement tape.
5. After rolls are secured to pipe, the backfill process may take place.

PADS:

1. Custom cut pads should be wrapped around the circumference of the pipe, covering all exposed areas. Ensure all pads are of sufficient dimension to protect the entire pipe plus a 6" overlap.
2. Place all end-to-end overlaps minimum 2".
3. After pads are secured to pipe, the backfill process may begin.

Filament Tape



RG-400 Uni-Directional High Performance Fiberglass Reinforcement Tape

RG-400 is an economical fiberglass reinforced tape designed for most packaging. The 1.1 mil polypropylene film combined with an aggressive 'solventless' pressure-sensitive adhesive provides resistance to filament delamination and separation, excellent adhesion to corrugated cartons, and outstanding holding power. Will hand break, no knives needed.

Tape Estimating Chart

RockGuard Tape Estimator

Pipe Diameter	Approx. Rolls Per Mile	Approx. Cases Per Mile
2"	58	2
4"	87	2
6"	119	3
8"	149	4
10"	181	4
12"	211	5
16"	261	6
18"	291	7
20"	322	7
24"	383	8
26"	413	9
30"	475	10
34"	537	12
36"	567	12
42"	659	14
48"	751	16



- 48 rolls of tape per case
- Maximum recommended spacing for tape is 6"
- Tape to be spiral wrapped around the pipe in one continuous motion

RockGuard HD
PIPELINE PROTECTION MESH
www.rockguard.biz

RockGuard® HD

PIPELINE PROTECTION MESH

800 848 4500

PIPEWEIGHTS.com
geotextile buoyancy pipeline control



RockGuard® HD
PIPELINE PROTECTION MESH
WWW.ROCKGUARD.BIZ

RockGuard®/Industrial Fabrics® may change product specifications without notice. The RockGuard®/Industrial Fabrics® system is suitable for use in the application described in our literature and on our website, provided proper installation and engineering principles are followed. Professional engineering should be consulted before installation of RockGuard® material to assure proper design. ALL EXPRESSED OR IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.