

Heavy Duty

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DESCRIPTION

ROCKGUARD® HD Pipeline Protection Mesh is an 11 mm, three dimensional bi-planar extruded diamond structured mesh rock shield manufactured from polyethylene.

APPLICATION

Rock shield for steel and plastic pipelines

ADVANTAGES

- · Does not interfere with cathodic protection
- · Excellent impact and compressive strengths
- · Initial protection during handling and backfill operations
- Long term protection from geologic movement, pipeline vibration and future excavation
- Consistent 11 mm thickness throughout the roll or pad to provide full protection
- Uniform open mesh with channels designed to resist wicking and prevent water storage next to the pipe
- · Chemically inert and will not rot
- · Effective in all climates
- Flexible for easy handling even in extremely low temperatures
- Ergonomically correct light weight minimizes risk of injury and allows for quick, efficient installation
- · Custom sized rolls and pads for every pipeline diameter

COVERAGES

- · RockGuard®HD is available in rolls and pads
- Rolls are utilized for pipeline diameters up to 26" with a width equal to the pipeline circumference plus a minimum 6" overlap
- Standard rolls are 50' in length and do not exceed 115
 pounds in weight. This ergonomically correct lightweight
 is a safety benefit and minimizes the risk of injury at the
 jobsite
- Pads are utilized for pipelines with diameters greater than 26" with a width equal to the pipeline circumference plus a minimum 6" overlap
- Standard pad lengths are 84"

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL RESULTS		
Thickness	ASTM D 5199	mm (inch)	11 (0.43)		
Mass/Unit area	ASTM D 5261	lbs/sf	0.38		
Structure	Consistent Diamond				
Polymer	Polyethylene				
Color	Black				
UV Protection	Carbon Black				

MECHANICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL RESULTS*	
Limestone Drop Impact Test	ASTM G13 (modified)	Pass/Fail	No failure @ 6" rock (1)	
Puncture Strength	ASTM D 6241 (modified)	lbs	270.8	
Tear Resistance	ASTM D 624	lbs/in	MD: 18.05	TD: 23.5
Compressive Strength	ASTM D 1621 (modified)	psi	11.4 @ 10% deflection	
Ball Burst Strength	ASTM D 3787	lbs	98.1	
Abrasion Resistance	Custom	Pass/Fail	Pass - No effect on FBE coating	
Grab Tensile Strength	ASTM D 4632		MD: 220 lbs @ 122% elongation @ max load	
			TD: 232 lbs @ 127% elongation @ max load	
Low Temperature Brittleness	ASTM D 2136 modified -50C	Pass/Fail	Pass	
Cathodic Protection	Custom	Pass/Fail	Pass - No inhibiting effect	
Melt Temperatue	ASTM E 793 / E 794		233.9 F	113.1 C
Impact Strength	ASTM G14	in.lb	148.6	
Tensile Strength	ASTM D 4595	lbs	MD: 438.9	TD: 412.3
Tensile Break Elongation	ASTM D 4595	%	MD: 112.1	TD: 133.0

(1) A 50-pound load of properly sized rock is dropped 6' onto the surface of a Fusion Bonded Epoxy (FBE) coated pipe protected by RockGuard HD. The test is run using 1.5", 3", 4" and 6" rock, 10 drops for each size. The FBE coated pipe is inspected visually and using a holiday detector test after each drop.

