

SECTION – ROCK SHIELD PIPELINE PROTECTION MESH

COLOR KEY – APPLIES TO GRID-GUARDHD, APPLIES TO GRID-GUARDHD PLUS, APPLIES TO BOTH

PART 1 - GENERAL

- The purpose of this is to specify the requirements for ordering and installing Rock Shield for both steel and plastic pipe.
- The purpose of the Rock Shield is to protect the pipe coating surface from damage during and after backfill operations.
- The Rock Shield should be an extruded polymer that comes in either a roll or pad, depending on pipeline diameter.
- Rock Shield made from polymers allow for both protection during construction and flexibility that tolerates normal pipe movement that can occur during construction activities.
- The Rock Shield should include a heat laminated backing of 4oz to 6oz permeable geotextile.
- Rock Shield made from polymers allow for both protection during construction and flexibility that tolerates normal pipe movement that can occur during construction activities. The addition of a geotextile backing grants further protection as it helps the rock shield to “slip” around the pipeline.

PART 2 - SPECIFICATIONS

- Rock Shield should be bi-directional and made of extruded polyethylene material.
- Rock Shield should be bi-directional, made of extruded polyethylene material with a 4oz – 6oz geotextile backing.
- The impact resistance (ASTM G14) of the Rock Shield should be a minimum of 89 in/pound.
- The impact resistance (ASTM G14) of the Rock Shield should be a minimum of 141 in/pound.
- The tensile strength (ASTM D 4595) should be a minimum of MD/58 and TD/30.
- The compressive strength (ASTM D 1621 MOD) of the Rock Shield should be a minimum of 90 psi @ 50% deformation.
- The Rock Drop Test (ASTM G13 MOD) of the Rock Shield should equal “No Failures” at both 4” and 6” drops.
- The minimum thickness of the Rock Shield should be 11 mm (0.43”).

PART 3 - STORAGE

- Inspect the Rock Shield upon receipt.
- Store the Rock Shield underneath tarps. If Rock Shield is palletized with a black carbon plastic wrapping, tarps are unnecessary.

PART 4 - INSTALLATION INSTRUCTIONS

- Rock Shield rolls or pads shall be affixed to pipe utilizing non-metallic bands of ¾” wide filament tape.
- Rock Shield should completely encircle the pipe with a minimum overlap of 4-6 inches.

- Overlap should be located at the bottom radius (6 o'clock position).
- Roll to roll and pad to pad overlap should be a minimum of 2-4 inches.
- During back-fill operations, caution should be taken to avoid dumping back-fill directly on pipe. A "shading" technique should be utilized.
- Follow manufacturer's procedures for installation.

PART 5 - APPROVED MANUFACTURERS

- JDR Enterprises – Grid-GuardHD and Grid-GuardHD PLUS

END OF SECTION