



GENERAL

TUFF-N-NUFF Rock Shield is a non-woven mat consisting of small diameter (approximately 0.050") strands of flexible PVC. The strands are bonded to each other in a controlled, random pattern. TUFF-N-NUFF Rock Shield protects pipe coatings from direct impact during backfilling operations. It also provides long-term protection by keeping hard objects in the backfill away from the pipe coating during operation of the line. TUFF-N-NUFF protects the pipe coating from these abrasive objects as lateral and longitudinal movements occur.

TO INSTALL

TUFF-N-NUFF is installed in any of **three ways**, depending on pipeline diameter, available equipment, and contractor's choice.

Method 1 - For pipelines measuring 20" in diameter or less the "cigarette wrap" method is recommended. Unroll TUFF-N-NUFF rolls along the top of the pipe allowing the free edges to hang down. The width of the TUFF-N-NUFF **roll** is matched to the circumference of the pipe and includes a nominal overlap of 4". Secure the free edges in place with monofilament tape or nonmetallic strapping overlapping the ends at the 6 o'clock position of the pipe for maximum protection.

Method 2 - 72" wide TUFF-N-NUFF **pads** are available from the factory cut to length matching the circumference of the pipe. Pads are wrapped around the circumference of the pipe, with ends overlapped approximately 2" to 4" at the 6 o'clock position. Pads are secured in place with monofilament tape or non-metallic strapping. Pads are placed in this manner along the length of the pipe with an edge overlap of 1" to 2".

Method 3 - The third method of installing TUFF-N-NUFF is spiral wrapping. TUFF-N-NUFF can be purchased in **roll** form and spiral wrapped around the pipe by hand or with a spiral wrap tape machine.



