TECHNICAL COMPARISON
ENVIRAWRAP vs. COMPETITORS

TESI CORROSION PROTECTION

ENVIRAWRAP ADVANTAGES

- **It's elastic and cut to size!**
  It can suit different pile shapes, sizes, materials and follow material thermal expansions. Its elasticity is permanent, it will not loosen, slip-off or sag thanks to the inner scrim and PU fabric features.
- **Permanent Hoop tension** (imposed up to 1 ton/sq. meter) is achieved by bolt tightening which forces the anti-corrosion material, that impregnates the felt layer, against the pile's surface and into its irregularities.
- **It's resealable!**
  The wrap can easily be opened and resealed to allow substrate inspections.
- **One-piece, One-step installation even underwater!**
  Unlike its competitors, it protects the substrate without the prior use of primers, fillers or tapes. The felt layer repels the water while installing underwater.
- **No need for blasting and primers,** or white metal surface preparation.
- **Can be applied directly** on rusty steel surfaces.
- **Only mechanical removal** of marine growth and, if any, delaminated iron oxide is necessary.
- **Installation time** 1/10 less than competitors.

	ENVIRAWRAP	COMPETITOR
CONSTRUCTION	Custom Built, Single Component, Memory Enhanced Hoop Tension, Polyurethane, Polyamide (Nylon) Textile, Reinforced Composite, with Co-bonded Felt Factory Impregnated with Corrosion Inhibited Hydroscopic Gel, Ready for Immediate Installation.	Three separately applied Components: 1. Petrolatum Paste 2. Non-woven HDPE Backed, Petrolatum Impregnated, Hand Applied Spiral wound, Marine Tape. 3. 2 mm Non-reinforced HDPE outer Jacket
TOTAL INSTALLED THICKNESS	4.75 mm Single Reinforcement (STD-19) 6.25 mm. Double Reinforcement (HD)	Inner Tape and Paste 3 mm. Outer Jacket 2 mm.
CLOSURE FLANGES	Detachable GRE Reinforced Marine Geon Extrusion	Non Reinforced HDPE Extrusion Welded to Jacket Panel
CLOSURE METHODS	Envirawrap Single Ply: 4.75 mm, Re-usable High-Tensile Draw Bolt Compressed Air ,or Manual Tightened, or Air-driven Light Weight Closure Calipers Envirawrap HD: 6.25 mm. Re-usable High Tensile Draw Bolts Driven by Rotary Air or Hydraulic Operated Impact Wrench	Hand Closure using Socket Wrench Hydraulic Closure Rams 3 sets per 2 meter height Jackets, Very Heavy
PERMANENT ELASTIC RETAINING FORCE	Single Ply: 1100 KG/ Meter Vertical Pile Height) HD: 2200 KG/Meter Vertical Pile Height Designed to Resist 100 Yr. Storm, Wave Suction Forces.	Not Published. The elasticity modulus, of non-reinforced HDPE can permit long term creep, depending on temperature and/or marine growth build-up.
POST INSTALLATION INSPECTION	May be removed and refitted multiple times if required during service life. Can also be fitted with corrosion rate coupons.	Cannot be removed and refitted but may be built with an inspection port to access substrate.
FASTENER TYPES	316L Bolt Sets & Nylon Thread Protector 316 Self Threading Fasteners Options Titanium, Monel, Inconel 625	SS 316 Bolt Sets
INSTALLATION RATES	Diving Contractor's Daily Installation Logs shows average of #12 diam. 600 mm wraps per day using 3 man dive team.	Not published, but multiple step required for installation leads to longer installation time.
MAX ONE PIECE LENGTH	4.5 meters interlocking with preceding wraps to provide any protected length required	Not Published, but limited to width of HDPE Extruded Sheet, but may be overlapped to extend protected length.