

# PROTECTION OF TIE BARS & CABLES

LEADERS IN SEALING TECHNOLOGY

CORROSION PREVENTION AND PROTECTION AGAINST MECHANICAL DAMAGE FOR BURIED OR EXPOSED TIE BARS, CABLES , MACALLOY BARS, TENDONS ETC

# **Product & Application Data**

#### **Benefits**

- Minimum preparation required May be applied by hand or by wrapping machine
- Allows for movement of the rods etc e.g. flexural or post tensioning Highly conformable

Several systems are available depending on the condition of the tie bar surface and/or the level of mechanical protection required.

# 1. Clean, new tie bars:

**Denso Primer 'D':** brush applied primer for Densopol Tapes.

**Densopol 60 Tape:** A synthetic fabric reinforcement coated with rubber bitumen adhesive compound and backed with a conformable pvc film.

No further layers are required for this system.

#### 2. Contaminated or rusty tie bars:

**Denso MP Primer:** A soft petrolatum primer.

**Denso Tape:** A non-woven carrier impregnated and coated with a neutral compound. Densyl Tape should replace Denso Tape for tropical climates.

# Outerwraps for heavy duty protection:

**Densotherm CA Tape:** a synthetic fibre fabric impregnated and coated with a polymer modified bitumen adhesive.

or

Densopol 60 Tape: see above.

# Outerwrap for light duty protection:

**Denso PVC Self-Adhesive Tape:** a tough, conformable pressure sensitive adhesive tape. (Denso PVC Self-Adhesive Tape may only be used



Thames Barrier: Pre-stressing bars in vital trunnion bearings are protected with a Denso system. Downstream new river walls have been constructed using Denso protected tie bars.

as an outerwrap in areas where the risk of mechanical damage is slight, i.e. in ducts or above ground.)

# **Optional:**

**Densyl Mastic:** a cold applied self supporting mastic, is recommended for use on turnbuckles.

# Method of Application

# **Cleaning and Priming**

Clean the surface of loose rust, scale etc., by suitable cleaning methods, e.g. wire brushing. Prime with Denso MP Primer, by gloved hand or brush, including screw threads, sockets and fittings. (continued overleaf)



Close up of tie bars protected by Denso MP Primer and Tape overwrapped with yellow Denso Self-Adhesive PVC Tape.

# **Method of Application (continued)**

#### Denso Tape:

Apply spirally to the tie rod. Overlap should be 55% to ensure a double thickness of tape. Smooth the tape surface to ensure overlaps are completely sealed.

# Densotherm CA Tape /Densopol 60 Tape:

Apply spirally over the Denso Tape. The overlap should be 55% to give a double thickness. Make sure the tape is in good contact with the surface and that no air pockets or voids are formed. Ensure that all the tape edges are firmly sealed down. Gentle warming with a hot air blower may be used to assist the application below 15°C.





# Denso PVC Self Adhesive Tape:

Apply spirally over the Denso Tape with a 55% overlap. Ensure that there are no air pockets or voids and that all the tape edges are sealed down.

Tie Rod Diameter mm	Denso MP Primer kg	Tape Width	Denso Tape Rolls 55% Overlap	Densotherm CA Tape Rolls or Densopol 60 Tape Rolls 55% Overlap	Denso PVC Tape Rolls 55% Overlap
12	1.0	50	18	24	8
16	1.5	50	24	30	9
18	1.5	50	27	33	10
20	1.5	50	30	36	11
24	2.0	50	36	42	13
25	2.0	50	37	44	14
27	2.0	50	40	47	15
28	2.0	50	42	48	15
30	2.5	50	44	51	16
32	2.5	50	47	54	17
35	3	50	52	58	18
36	3	50	53	60	19
40	3.5	50	59	66	20
50	4	50	74	80	25
51	4.5	50	75	82	25
60	5	50	88	95	29
75	6	75	74	78	24
90	7	75	88	93	29
100	8	75	98	103	32
108	8.5	100	80	83	26
114	9	100	84	87	27
121	10	100	89	93	29
127	10.5	100	94	97	30
133	11	100	98	101	31
140	11.5	100	103	106	33
152	12.5	100	112	115	35

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