

# DENSO STEELCOAT SYSTEMS

DENSO HI-TACK PRIMER, DENSO HI-TACK TAPE,  
DENSO REINFORCING TAPE, DENSO ACRYLIC TAPE AND DENSO TOP COAT

## INSTRUCTIONS FOR USE

### General:

Denso Steelcoat is a range of tape and liquid coating systems for the long-term protection of above ground pipe and structural steel work. There are four basic systems to suit the wide variety of applications.

## SYSTEM A

**Components:** Denso Hi-Tack Primer  
Denso Hi-Tack Tape

**Surface Preparation:** Remove all dirt, loose rust, flaking coating and millscale and prepare the metal surface by scraping and wire brushing or other suitable means to achieve St2 (ISO 8501-1).

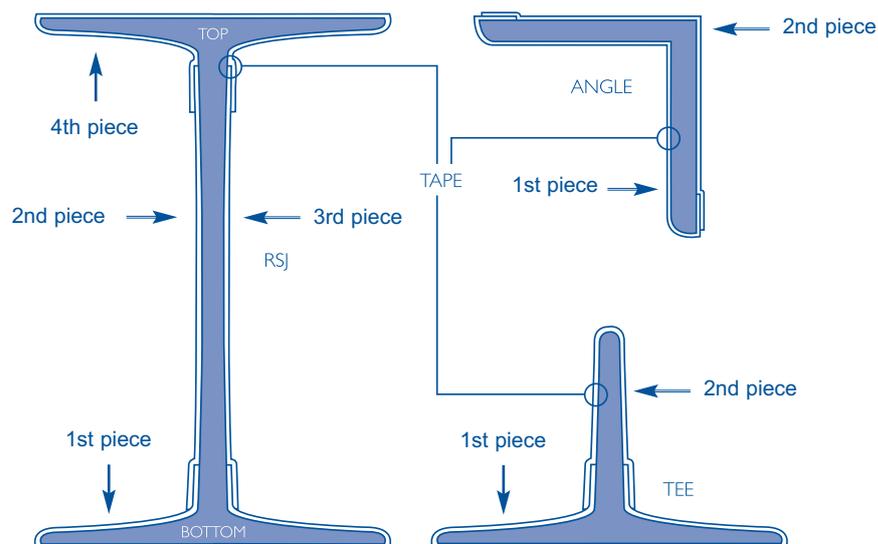
### APPLICATION TO STEELWORK MEMBERS (eg angles, RSJ's)

**Application:**  
**(a) steelwork members (eg angles, RSJ's)**

(i) After preparation brush apply a uniform coating of Denso Hi-Tack Primer at 5m<sup>2</sup>/litre over the entire metal surface. Leave for 15-30 minutes to dry.

(ii) Choose widths of tape which permit overlaps of at least 25mm to be made in a downward direction on vertical surfaces and on the upper face on horizontal surfaces. Do not overlap the tape on the underside of the horizontal surfaces (See diagram).

### Diagram of the correct application procedure



METHOD FOR WRAPPING STEELWORK



90 YEARS OF PIPELINE PROTECTION

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## SYSTEM A (continued)

### Application: (a) steelwork members (eg angles, RSJ's)

(iii) Precut up to 2m lengths of tape for application along the member or suitable lengths of 450mm wide tape to go around the member as diagram.

(iv) Apply the thickly coated side of the tape to the steelwork and smooth down thoroughly without stretching the tape. At internal angles apply the tape to one face first and press well into the corner before pressing it down on the second face.

(v) Apply the next strip of tape overlapping the first by 25mm and press down thoroughly at the overlaps. Ensure that the entire area of tape is smoothed down without air pockets under the tape.

(vi) At rivet heads, nuts and bolts, etc make two cuts in the tape in the form of a cross over the rivet or bolt. Press the tape down thoroughly around the head and then place a small patch of tape to cover the rivet or bolt with at least 25mm overlap all round and smooth thoroughly.

(vii) Where steel angles or joists have corroded or sharp edges, apply a 50mm wide tape along the entire edge before applying the main protection.

(viii) On vertical members always start applying tape at the bottom and work up to ensure that overlaps will be in a downward direction.

(ix) Finally inspect the whole structure smoothing down as necessary to ensure a neat appearance with all overlaps pressed down and no gaps or bare areas.

### APPLICATION TO TUBULAR STRUCTURES (eg pipes)

### Application: (b) pipework and tubular structures (eg pipes)

(i) After preparation brush apply a uniform coating of Denso Hi-Tack Primer at 5m<sup>2</sup>/litre over the entire metal surface. Leave for 15-30 minutes to dry.

(ii) Select as wide a width of tape as practical for ease of application.

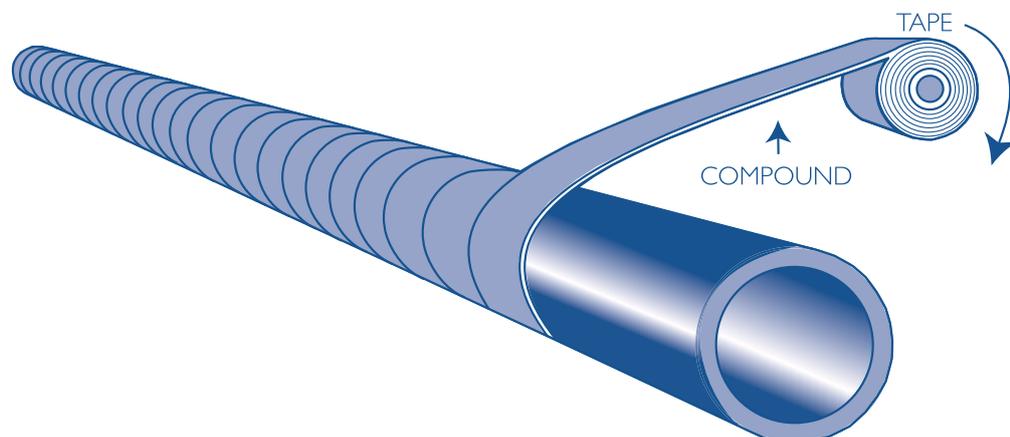
(iii) On vertical pipes start wrapping at the bottom and work up.

(iv) Unwind about 300-500mm of tape and apply the inside of the roll to the pipe surface. Unroll the tape around the tubular section in a spiral, overlapping each turn by at least 15mm.

(v) Apply sufficient tension to ensure good contact with the metal but do not overstretch the tape.

(vi) Smooth down any folds or creases and press down all overlaps.

### Diagram of the correct application procedure



METHOD FOR WRAPPING PIPEWORK WITH DENSO HI-TACK TAPE

# SYSTEM B

**Components:** Denso Hi-Tack Primer  
Denso Hi-Tack Tape  
Denso Reinforcing Tape  
Denso Top Coat

**Surface Preparation:** As system A

## APPLICATION TO STEELWORK MEMBERS (eg angles, RSJ's)

**Application:  
(a) steelwork  
members  
(eg angles,  
RSJ's)**

- (i) Apply Denso Hi-Tack Primer and Tape as for system A.
- (ii) Precut up to 2m lengths of Denso Reinforcing Tape for application along the member or suitable lengths of 450mm wide tape to go around the member as diagram.
- (iii) Peel off the interleaving and apply the adhesive side of the tape to the previously applied Denso Hi-Tack tape. Press down thoroughly ensuring thorough contact with the underlying tape. Do not stretch the tape.
- (iv) Apply the next strip of tape overlapping the first by 25mm and press down thoroughly at the overlaps.
- (v) At rivet heads, nuts and bolts etc make two cuts in the tape in the form of a cross over the rivet or bolt. Press the tap down thoroughly around the head and apply a small patch to cover the rivet or bolt with at least 25mm overlap all round and press down thoroughly.
- (vi) Thoroughly press or roll down all overlaps.
- (vii) Brush apply a coat of Denso Top Coat at approximately 2.5-3m<sup>2</sup>/litre (see note later).
- (viii) Finally, inspect the whole application to ensure that there are no gaps in the outer coating. Rectify, if necessary by applying additional Denso Top Coat.

## APPLICATION TO TUBULAR STRUCTURES (eg pipes)

**Application:  
(b) pipework  
and tubular  
structures  
(eg pipes)**

- (i) Apply Denso Hi-Tack Primer and Tape as for System A.
- (ii) Select the same width of Denso Reinforcing Tape.
- (iii) Unwind about 300-500mm of Tape and peel back the interleaving. Apply the adhesive side of the tape over the Denso Hi-Tack Tape already applied so that overlaps do not coincide. Wrap the tape spirally with at least 15mm overlap using sufficient tension to ensure that it conforms well without trapping air. Discard interleaving as the tape is applied.
- (iv) Press down all overlaps thoroughly.
- (v) Brush apply one coat of Denso Top Coat at approximately 2.5-3m<sup>2</sup>/litre (See note later).
- (vi) Finally, inspect the whole application to ensure that there are no gaps in the outer coating. Rectify if necessary by applying additional Denso Top Coat.

# SYSTEM C

**Components:** Denso Hi-Tack Primer  
Denso Hi-Tack Tape  
Denso Acrylic Tape

**Surface Preparation:** As system A

## SYSTEM C (continued)

### APPLICATION TO TUBULAR STRUCTURES (eg pipes)

- Application:**
- (i) Apply Denso Hi-Tack Primer and Tape as for system A.
  - (ii) Select the same width of Denso Acrylic Tape.
  - (iii) Apply the Denso Acrylic Tape in the same way as Denso Reinforcing Tape (system B).
  - (iv) Finally, inspect the whole application and ensure that there are no gaps and all overlaps are firmly pressed down.
  - (v) For long pipe lengths Denso Hi-Tack and Denso Acrylic Tape can be applied simultaneously with a wrapping machine.

## SYSTEM D

**Components:** Denso Primer D  
Denso Acrylic Tape

**Surface Preparation:** Remove all dirt, loose rust, flaking coatings and millscale and prepare the metal surface to at least St2 by power wire brushing or Sa2½ by grit blasting.

### APPLICATION TO TUBULAR STRUCTURES (eg pipes)

- Application:**
- (i) After preparing the surface brush apply a coat of Denso Primer D at 11m<sup>2</sup>/litre and allow to dry (15-20 minutes).
  - (ii) Select as wide a width 236\* as practical for ease of application.
  - (iii) Peel back about 300-500mm of interleaving and apply the adhesive side to the primed pipe.
  - (iv) Apply the tape spirally by hand or machine or in successive circumferential turns ensuring that overlaps are at least 25mm edge to edge and 50mm end to end. Apply sufficient tension to ensure that the tape is in complete contact with the metal surface and at overlaps.
  - (v) Denso Acrylic Tape requires no extra outer coating.

#### DENSO TOP COAT

Three types of Denso Top Coat are available:

*Denso Urethane Top Coat:* Dark grey high solids single pack polyurethane. Especially suited to damp or wet weather conditions.

*Denso Epoxy Top Coat:* Two pack solvent free epoxy coating available in a range of colours.

*Denso Acrylic Top Coat:* Single pack water based acrylic coating available in a range of colours.

Separate instructions for use will be provided for each Denso Top Coat.



**Denso**<sup>®</sup>  
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ISO 9001 Certified



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