# PAINT SPECIFICATIONS - COATING SYSTEMS FOR STEEL AND ALUMINIUM

#### NON FERROUS (ALUMINIUM, BRASS) COATINGS:

- 1. DEGREASE TO AS 1627.1
- 2. WHIP BLAST TO REMOVE ALL EXISTING COATINGS USING A FINE GARNET SAND (NO STEEL GRIT OR SHOT SHALL BE USED) PROFILE TO BE LESS THAN 10 MICRONS. NEW MATERIALS THAT HAVE NO COATINGS NEED NOT BE BLASTED.
- 3. ETCH PRIME USING PPG MULTIETCH 302 OR EQUIVALENT. 6-12 MICRONS
- 4. MID COAT USE PPG AMERLOC 2 OR EQUIVALENT HIGH BUILD EPOXY, TO 125 TO 150 MICRONS.
- 5. TOP COAT USE PPG 450N POLYURETHANE OR EQUIVALENT, TO 40 TO 50 MICRONS.

## FERROUS (STEEL) MATERIALS:

- 1. ALL STRUCTURAL AND NON STRUCTURAL STEELWORK OF THICKNESS 5MM AND ABOVE SHALL BE HOT DIP GALVANISED AFTER FABRICATION 2. INTERNAL MEMBERS TO BE PAINTED SHALL BE:
  - DEGREASED TO AS1627.1 2003
- WHIP BLAST TO AS1627.4 2005 APPROXIMATELY CLASS 1. THIS IS TO REMOVE THE SHINE FROM THE SURFACE AND CREATE A PROFILE. IT DOES NOT REMOVE THE GALVANISED ZINC LAYER.
  - PRIMED WITH TWO PACK EPOXY ZINC PHOSPHATE (182 ZPK OR EQUIVALENT) AT 50 MICRONS
  - TOP COAT WITH TWO PACK POLYURETHANE (450N OR EQUIVALENT) TO 60 MICRONS
- 3. ALL EXTERNAL MEMBERS (EXTERNAL PAINTING AFTER HOT DIP GALVANISING) SHALL BE:
  - DEGREASED TO AS1627.1
- WHIP BLAST TO AS1627.4 2005 APPROXIMATELY CLASS 1. THIS IS TO REMOVE THE SHINE FROM THE SURFACE AND CREATE A PROFILE. IT DOES NOT REMOVE THE GALVANISED ZINC LAYER.
  - PRIMED WITH TWO PACK EPOXY ZINC PHOSPHATE (AMERCOAT 182 ZPK OR EQUIVALENT) AT 50 MICRONS
  - INTERMEDIATE COAT HIGH BUILD EPOXY (AMERLOCK 2 OR EQUIVALENT) TO 125 TO 150 MICRONS
  - TOP COAT WITH TWO PACK POLYURETHANE (450N OR EQUIVALENT) TO 60 MICRONS

# REPAIRS TO HOT DIP GALVANISED MEMBERS DUE TO WELDING CUTTING (HOT DIP GALVANISING REPAIR):

- 1. DAMAGED ZINC COATED AREAS SHALL BE DEGREASED IN ACCORDANCE WITH AS1627.1 2003
- 2. REMOVE ALL LOOSE AND DAMAGED GALVANISING COATINGS WITH POWER SANDER USING SHARP 80 GRIT SAND PAPER TO ACHIEVE A CLEAN BARE METAL. REMOVE ALL DUST PRIOR TO PAINTING.
- 3. APPLY ONE COAT OF TWO PACK EPOXY ZINC RICH PAINT (GREATER THAN 92% ZINC) (AMERCOAT 307 OR EQUIVALENT) AT 75MICRONS

### REPAIRS TO EXTERNAL STEELWORK PAINT/GALVANISING COMBINATION:

- 1. PAINTED AREA SHALL BE FEATHERED UNIFORMLY AT NO LESS THAN 1:100 (IE 200 MICRONS CREATES A FEATHER TAPER OF 20MM WIDTH), USING A GRINDER WITH SHARP 80 GRIT SANDPAPER.
- 2. FIRSTLY REPAIR ZINC COATING IF DAMAGED, AS PER "HOT DIP GALVANISING REPAIR" ABOVE
- 3. REPAIR PAINT SYSTEM AS PER 'EXTERNAL PAINTING", AS DETAILED ABOVE EXCEPT EXCLUDE DEGREASING AND WHIP BLASTING
- 4. OVERLAP EACH COAT BY AT LEAST 50MM

### GENERAL NOTES

- 1. ALL COATINGS SHALL BE FROM THE SAME MANUFACTURER
- 2. APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS
- 3. ALL WELD SPATTER SHALL BE REMOVED, RADII CORNERS SHALL BE TO NOT LESS THAN 2MM.
- 4. TESTING OF THE CONTINUITY AND THICKNESS OF THE FINISHED PAINT SYSTEM SHALL BE UNDERTAKEN BY THE PRINCIPAL AT THEIR DISCRETION WITH FAILURE OF COATINGS TO BE REPAIRED BY THE CONTRACTOR
- 5. COLOUR OF PRIMER, INTERMEDIATE AND TOP COATS TO BE SUFFICIENTLY DIFFERENT IN COLOUR TO ALLOW IDENTIFICATION IN THE EVENT OF A DESTRUCTIVE TOOKE TEST.
- 6. COLOURS OF REPAIR PAINTING SHALL MATCH ADJACENT SURFACE COLOURS OR COLOURS AS DEFINED IN SPECIFICATION
- 7. PAINT THICKNESS SHALL BE WITHIN THE RANGE OF -10% TO +20% OF ALL READINGS. THE AVERAGE OVER EACH METRE SQUARED AREA SHALL NOT BE LESS THAN THE REQUIRED THICKNESS FOR THE OVERALL COATING THICKNESS SPECIFIED.
- 8. ALL BOLTS AND FIXINGS LOCATION DETERMINES FIXING TYPE.
  - WITHIN 300M SURF ZONE 316 STAINLESS STEEL
  - 300M TO 1KM 304 STAINLESS STEEL, ELSE HOT DIP GALVANIZED.
- 9. ALL STAINLESS STEEL TO BE ELECTRICALLY ISOLATED USING NYLON BUSHES AND WASHERS.
- 10. ALL FAYING STRUCTURAL CONNECTIONS (BOLTED TOGETHER SURFACES) SHALL BE SEALED TO PREVENT MOISTURE INGRESS WITH NEUTRAL CURE SEALANT

0	CONSTRUCTION	05.07.16	T.A.	AS SHOWN	The City of NewCastle	SIGNED:	PAINT SPECIFICATION FOR ROAD AND LANDSCAPE	A3800	oF
No. A3 ORIGINA	AMENDMENT DETAILS  AL THIS SHEET WAS PREPARED IN COLOUR AND V	DATE  ILL BE INCOMPLI	INITIALS ETE IF COPIED	COORDINATE SYSTEM: HEIGHT DATUM: AHD	REVIEWED: J.C.	DATE: 29.09.7016	STEEL AND ALUMINIUM FURNITURE	AMENDMENT No.	1 Sheets