STANDARDS ASSOCIATION OF AUSTRALIA

AUSTRALIAN STANDARD SCHEDULE (EMERGENCY SERIES)

FOR THE

COLOUR IDENTIFICATION OF METALLIC MATERIALS FOR AIRCRAFT PURPOSES

AMENDMENT NO. 2

PREFACE TO AMENDMENT

Since the issue of Amendment No. 1 in May, 1949, the British AID/AIS Inspection Instruction D/412-Issue No. 7, together with amendments, has been superseded by Issue No. 8 with Amendment Lists Nos. 1 and 2 and Issue No. 9. This amendment to (E)2D.500-1945 has therefore been prepared, following the procedure outlined in the Preface to Amendment No. 1, to take into account the changes brought about by the revision of document D/412 insofar as the sections of the schedule applying to the British specifications are concerned.

The following additions and alterations shall be made to Australian Emergency Standard No. (E)2D.500-1945:

PAGE 1.

Clause 2. Colours - Table I. Replace existing table with the following table:

TABLE I

COLOUR	COLOUR NUMBER	NAME OF COLOUR
(Common Name)	in B.S. No.381C-1944	in B.S. No.381C-1944
White Black Blue Brown Green Grey Orange Red Yellow Violet	104 410 221 631 557 537 355	Blue Azure Light Brown Brilliant Green Light Grey Light Orange Signal Red Lemon Yellow

PAGE 2.

Delete existing clauses and insert the following:

"4-1. Application. Where metallic material is to be colour identified, the appropriate colours specified in Schedule I or II shall be applied in the sequence shown therein, the first colour shown being applied nearest the end (or corner) of the material, or first when the method at 4-2(c) is employed."



- "4-2. The colours shall be applied to the materials as follows:
 - (a) Bars and Tubes. Each bar and tube shall have the appropriate colours painted on each end in bands in the manner specified in Table II.

TABLE II

Number of Colours in Identification	METHOD OF APPLICATION				
	Materials complying with British specifications	Materials complying with Australian specifications for which no British specification has been issued ²			
1 2 3 4	l band 12 in. wide 2 bands each 6 in. wide 3 bands each 4 in. wide 4 bands each 3 in. wide	2 bands each 3 in. wide 3 bands each 2 in. wide 4 bands each $1\frac{1}{2}$ in. wide			

This method of application applies to all materials identified in accordance with the colours or colour combinations specified in Schedule 1.

²This method of application applies only to materials for which grey is the initial colour in the colour combination specified.

- (b) Sheet and Strip. Each sheet and strip shall have the appropriate colours painted on in one of the following methods:
 - (i) A band or bands of the colour shall be painted diagonally across the corner bearing the identification stamp marks. The width of the band or bands shall be in accordance with Table II, and the painting shall commence 6 infrom the corner, measured at right angles to the length of the bands.

Sheets and strips less than 1 ft. wide shall be painted on one end in a manner similar to that specified for bars and tubes.

- (ii) The colours shall be applied to the sheet or strip in the form of a circle. The colour in a single colour identification or the initial colour in a multiple colour identification shall be applied in a circle having a diameter of 3 in. and subsequent colours in concentric annular rings 1½ in. wide.
- (iii) Sheets and flat strips may be painted in the following manner, which is suitable for large-scale production. The sheets shall be stacked and then slid end-wise so that 1½ in. of the end of each sheet is exposed (in addition to the whole surface of the top sheet). Bands of colour of the width specified in Table II shall then be painted on all of the sheets in one operation resulting in an identification mark

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 $1\frac{1}{2}$ in. by 12 in. or 6 in. as the case may be, on each sheet. The paint shall be applied to the face of the sheet bearing the identification stamp marks and shall preferably be adjacent thereto.

- (c) Wires and Rods. The required colours shall be painted in bands on the outside of each bundle and the outer turns of each coil. The band or bands shall be at right angles to the wires or rods and not less than 3 in. total width, e.g., one band 3 in. wide or three bands l in. wide. The paint marks shall extend at least half-way round the bundle of wires or rods at the selected part of the coil."
- "4-3. Metallic materials may be required to be protected from corrosion by the application of lanolin resin protective to D.T.D. 663. This protective is coloured red and in such cases, therefore, to avoid confusion, the colour identification markings shall be applied first and, at the end of colour band(s), remote from the end or edge of the material, a half inch wide band of black paint shall be added. When the paint markings are dry, the protective medium shall be applied. Where this is done by a dipping process, the protective shall be removed from the colour identification markings up to and including the narrow black band by swabbing off with lead-free petrol. If the protective is applied by spraying or brushing, the paint markings shall be left clear."

PAGE 3.

SCHEDULE I

BRITISH STANDARD SPECIFICATIONS

Brass, Bronze and Copper

SPECIFICATION NUMBER		DESCRIPTION	COLOURS		
British	Australian	DEGORIT TTOW	COHOURS		
B.S.409 B.S.1110 B.S.1400-		Naval brass plates, sheets and strips: As rolled	Black, blue, brown Black, red, green Green, blue, red Red, green, red Blue		
B5-1 B.S.1432 B.S.1433		Copper for electrical purposes. She ets and strips: Annealed Medium-hard	Red, black, red Blue, red Black, green, red		
B.S.1434	f. f.	poses. Bar and rod: Annealed Medium-hard. Hard Copper for electrical purposes. Commutator bars	Red, black, red Blue, red Black, green, red .Green, blue, green		

PAGE 5.

SCHEDULE I. - Continued

BRITISH STANDARD SPECIFICATIONS. - Continued

Light Alloys

SPECIFICA	ATION NUMBER		COLOURS		
British	Australian	DESCRIPTION			
L.42		Aluminium-copper-magnesium- iron-nickel alloy bars and	Black, red, blue		
L.48		billets for forging. 99.7% primary (virgin) alumin- ium notched bars and ingots	Blue, brown		
L.49	Y-5-	for remelting. 99% secondary aluminium notched bars and ingots for	Blue		
L.50		remelting. Secondary aluminium alloy notched bars and ingots for remelting.	Yellow		
L.54 L.55		99% aluminium tubes. Aluminium 2% magnesium alloy tubes (half-hard).	Blue, red Red, white, yellow		
L.56		Aluminium 2% magnesium alloy tubes (soft).	White, brown, yello		
L.57		Aluminium-copper-magnesium alloy wire for rivets.	Violet*		
L.58		Aluminium 5% magnesium alloy wire for rivets.	Green*		
59		Aluminium-manganese alloy sheets and strips (three- quarter hard).	Black, red, blue		
•60		Aluminium-manganese alloy sheets and strips (one-quarter hard).	Green, black, green		
.61		Aluminium-manganese alloy sheets and strips (soft).	Blue, yellow, blue		
. 62		Aluminium-copper-magnesium- silicon-manganese alloy tubes (solution-treated and aged at room temperature).	Green.		
•63		Aluminium-copper-magnesium- silicon-manganese alloy tubes (solution-treated and	Red, black, red		
•64	•	precipitation-treated). Aluminium-copper-magnesium- silicon-manganese alloy bars, extruded sections and forgings (solution-treated			
		and aged at room temperature: Bars and billets for forging	Black, yellow, red		
		Bars for machining and extruded sections.	Yellow, green, yello		
			Contd.		

^{*}The use of paint for the colour marking of rivet materials is not recommended.

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-		TION NUMBER	DESCRIPTION	COLOURS
	British	Australian	6	
	NS7 HS10 HS14 HC14 HS15 HC15		Annealed (soft), 0 Solution-heat-treated, W Fully heat-treated, WP Solution-treated, T Solution-treated, T Solution-heat-treated, W Solution-heat-treated, W	Blue, red, yellow Brown Brown, green Black, red, green Black, red, black Blue, brown Red, black, yellow Red, yellow
	B.S.1471	H.50	Fully heat-treated, WP Wrought aluminium and aluminium alloy tubes:	
	TIA		Annealed (soft), 0	Brown, blue, yellow Brown, blue, black
	TIB		Annealed (soft), 0	Black, green, red Black, green, yellow Black, blue
	TIC		Annealed (soft), 0 Hard, H Annealed (soft), 0	Brown, red Brown, black, green
	NT4		Half-hard, ½H Annealed (soft), 0	Brown, black, red Blue, green, yellow
7	NT6		Half-hard, ½H Annealed (soft), 0	Blue, green, brown Yellow, black, yellow Yellow, brown, yellow
2	NT7		Half-hard, $\frac{1}{2}H$ Annealed (soft), 0 Half-hard, $\frac{1}{2}H$	Blue, red, yellow Green, yellow, red
	HT10		Solution-treated, W Fully heat-treated, WP	Brown, green
	HT14 HT15		Solution-treated, T Solution-treated, W Fully heat-treated, WP	Black, red, green Blue, brown Blue, brown, red
	B.S.1476	H.54	Wrought aluminium and aluminium alloy bars, rods and sections:	
	EIA EIB EIC NE4 NE5 NE6 NE7 HE9		As manufactured, M Solution-treated, W Fully heat-treated, WP	Brown, blue, yellow Black, green, red Black, blue Brown, black, green Blue, green, yellow Yellow, black, yellow Blue, red, yellow Blue Blue, green Blue, green Blue, red
	HE10		Solution-treated, W Fully heat-treated, WP Solution-treated, W Fully heat-treated, WP	Brown Brown, green Black, green Black, brown
	HE14 HE15		Solution-treated, T Solution-treated, W Fully heat-treated, WP	Black, red, green Blue, brown Blue, brown, red
	B.S.1477	H.59	Wrought aluminium and aluminium alloy plate: As manufactured, M ••	Black, blue, yellow
	PIB		Half-hard, ½H As manufactured, M	Blue, white, yellow Brown, black, yellow Brown, black, white
	PIC		Half-hard, ½H As manufactured, M Half-hard, ½H	Brown, green, red Brown, white, red
	NP4 NP5/6 HP10		As manufactured, M As manufactured, M Solution-treated, W	Green, brown, red Green, blue, green Green, red, yellow Blue, black, yellow
	HP14 HPC14		Fully heat-treated, WP Solution-treated, T Solution-treated, T Solution-treated, W	Red, blue, white Red, blue, yellow Red, brown, yellow
	HPC15		Fully heat-treated, WP solution-treated, W Fully heat-treated, WP	Red, white, yellow Brown, green, white Brown, green, yellow

Add asterisk against the numbers of the following specifications which are now cancelled or obsolete:

L1, L3, L4, L30, L38, L39, L40, AL40, BL40, L45, AL45, BL45, L46, L47, AL47, BL47.

SCHEDULE I. - Continued

BRITISH STANDARD SPECIFICATIONS. - Continued

Magnesium and Magnesium Alloys

Insert new table on Page 5.

SPECIFICA	TION NUMBER	DECODIDATON			
British	Australian	DESCRIPTION	COLOURS		
L.120 L.121 L.123		99.5% magnesium ingots and notched bars for remelting Magnesium 8% aluminium alloy ingots Magnesium 10% aluminium alloy ingots	Black, brown, red Green Red		

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SCHEDULE I - Continued

BRITISH STANDARD SPECIFICATIONS - Continued

Steels

The second secon	TION NUMBER	DESCRIPTION	COLOUR
British	Australian		
S. 91A S. 91B S. 92A		Mild steel bars for forging Mild steel bars for machining 40-ton carbon-manganese steel	Black, green, brown Black, green, white Brown, green, yello
S.92B		bars for forging 40-ton carbon-manganese steel bars for machining	Black, white
S.93A	1	35-ton steel (normalised) bars for forging	Brown, green
S.93B		35-ton steel (normalised) bars for machining	Red, white
S. 94B		55-ton low alloy steel bars for machining	Green, white, red
S. 95A	×7 = ;	55-ton, 1% nickel-chromium- molybdenum steel bars for forging	Black, green, blue
S. 95B		55-ton, 1½ nickel-chromium- molybdenum steel bars for machining	Black, green, red
S. 96A		55-ton, 2½% nickel-chromium- molybdenum steel bars for	Black, red, black
S.96B		forging. 55-ton, 2½% nickel-chromium- molybdenum steel bars for	Black, red, blue
S.97A	- 21	machining 65-ton, 2½ nickel-chromium- molybdenum steel bars for	Black, white, gree
S.97B		forging 65-ton, 2½% nickel-chromium- molybdenum steel bars for	Black, white, red
S.98A	1	machining 75-ton, 2½% nickel-chromium- molybdenum steel(high carbon)	Blue, green, yello
S.98B		bars for forging 75-ton, 2½% nickel-chromium- molybdenum steel(high carbon	Blue, brown, blue
S. 99A		bars for machining) 80-ton, 2½ nickel-chromium- molybdenum steel (high carbon)	Blue, green, brown
8.99B		bars for forging 60-ton, 2½ nickel-chromium-molybdenum steel (high carbon)	Blue, brown, yello
S. 106A		bars for machining 60-ton, 3% chromium-molybdenum steel (suitable for nitrogen	Blue, brown, red
s.106B		Hardening) bars for forging. 60-ton, 3% chromium-molybdenum steel (suitable for nitrogen hardening) bars for maching.	Brown, red, green
			Contd.

100	SPECIFICAT	ION NUMBER	DESCRIPTION	COLOUR
10	British	Australian		
	S. 107	, and the second	3% nickel-chromium-molybdenum case-hardening steel bars	Green, white
	s.108A		Chromium-nickel heat-resist- ing steel (23/14) bars for forging	Blue, red, white
	S. 108B		Chromium-nickel heat-resist- ing steel (23/14) bars for machining	Blue, yellow, blue
	S. 109A		Chromium-nickel heat-resist- ing steel (23/18) bars for forging.	Brown, black, yellow
	S. 109B	1	Chromium-nickel heat-resist- ing steel (23/18) bars for machining	Brown, green, white
(S.110A		Chromium-nickel steel (corrosion-resisting) bars for forging.	Green, yellow, white
1	S.110B		Chromium-nickel steel (corrosion-resisting) bars for machining	Black, red
1	S.111A		High nickel high chromium steel bars for forging	Red, yellow, red
1	S.112		40-ton semi-free cutting steel. Bright bars for machining	Black, blue, green
	S. 113	nov.	45-ton carbon steel. Bright bars for machining.	Black, blue, yellow
	S.114		55-ton manganese-molybdenum steel. Bright bars for machining.	Black, brown, green
9	B.S. 1052		Mild steel wire: Finish (a) annealed Finish (f) tinned	Brown Black, red, black
(B.S. 1407 B.S. 1449 En. 20		Silver steel 26-ton steel plate, sheet and strip.	Green, yellow, green Yellow

Add asterisks against the numbers of the following specifications which are now cancelled or obsolete, S1-N, S.2, S.6, S.11, S.24, S.65, S.67, S.68, S.69, S.71, S.76, S.77, S.81, S.90.

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Add asterisks against the numbers of the following specifications which are now cancelled or obsolete. - T.4 and T.9.

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SCHEDULE I (CONTINUED)

D.T.D, SPECIFICATIONS

Amend the following:

D.T.D.	5% magnesium-aluminium alloy wire (for rivets).	Green

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SCHEDULE I. - Continued

D.T.D. SPECIFICATIONS

	P			
		TION NUMBER	DESCRIPTION	COLOURS
	British	Australian		
	D.T.D.425		*(Section III) bars for machin- ing not greater than 6 in	Blue, yellow
		· ·	dia. and extruded sections. *(Section III) bars for machining greater than 6 in. dia.	Green, blue, green
1	D.T.D.607		Copper strip for radiators and collers.	Green, black, green
(D.T.D.627		Brass rod or wire for machined components subject to a	Blue, white, blue
5	D.T.D.703		riveting operation. Nickel-chromium heat-resisting alloy sheets and strips Cold rolled and annealed	Blue, yellow, red
	D.T.D.711		(Nimonic 75). Magnesium-zinc-zirconium alloy ingots.	Black, brown
	D.T.D.713		2½% nickel-chromium-molybdenum steel tubes (75 tons):	
	D.T.D.714		Softened condition Nickel-chromium-iron heat- resisting alloy sheets and strips:	Brown, yellow, green Yellow, brown, yello
	D.T.D.715		Cold rolled and annealed (Nimonic 75F). Free-cutting corrosion-	Yellow, white, yello
	D.T.D.723		resistant steel (for nuts). 2½% nickel-chromium-molybdenum steel tubes (90 tons):	
3	D.T.D.725		Softened condition Nickel-chromium heat-resisting alloy (wrought) for gas turbine blades (Nimonic 80):	Brown, red, white
			(Section III) bars for	Brown, red, yellow
	D.T.D.736		machining Nickel-chromium heat-resisting alloy (wrought) for gas turbine blades (Nimonic 80A): (Section II) bars for	Red, white, yellow
			forging (Section III) bars for	Brown, white, yellow
	D.T.D.747		machining Nickel-cobalt-chromium, heat- resisting alloy (wrought) for gas turbine blades (Nimonic 90):	Blue, black, yellow
			(Section II) bars for forging	Green, black, white
			(Section III) bars for machining	Red, blue, white

^{*}The colours shown apply to material to D.T.D.423B and will apply to any subsequent issue. The colours for bars for machining and extruded sections to D.T.D.423A were "Red, yellow".

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Add asterisks against the numbers of the following specifications which are now cancelled or obsolete:

							- m -	100
D.T.D.	30	D.T.D.	195	D.T.D	. 310		D.T.D.	463
11	49	11	208	- 11	316		11	464
11	53	II .	213	11	325		11	473
11		11		11	326	1	11	478
	59		217				/0 -	
11	60	11	221	11	327		11	479
11	102	- 11	228	11	331		11	500
11	126	11	229	- 11	341		11	501
. 11	136	11	273	11	350		11	507
11	146	11	274	11	354		11	519
							17	
11	155	11	286	11	359			529
16	158	II .	299	11	364		# 1	535
11	176	11	301	11	367		. 11	600
		11	-	. 11.			11	628
11	185		303		422			
11	188	11	305	- 11	432		11_	650
11	190	11.	306	11	440			653
	720		000					

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SCHEDULE III

COLOUR INDEX

Add the following specification numbers to the colours indicated:

4		
1	COLOURS	SPECIFICATIONS
	Black, blue, brown Black, blue, green Black, blue, yellow	B.S.1470-S1C-O, B.S.1471-T1C-O, B.S.1476-E1C-M. B.S.409 (As rolled), B.S.1470-S1A-H, B.S.1471-T1A-H S.112. S.113, B.S.1477-P1A-M.
	Black, brown Black, brown, green Black, brown, red	L.72, B.S.1476-HE11-WP, D.T.D.711. S.114. L.42, L.120.
The same of the sa	Black, green, blue Black, green, brown Black, green, red Black, green, white	B.S.1476-HEll-W. S.95A, L.73. S.91A, B.S.1470-SlB-1/2H. S.95A, B.S.1432 (Hard), B.S.1433 (Hard), B.S.1470-SlB-0, B.S.1471-TlB-0, B.S.1476-ElB-M. S.91B.
1	Black, green, yellow	B.S.1470-S1B-H, B.S.1471-T1B-H.
	Black, red, black Black, red, blue Black, red, green	S.110B. S.96A, B.S.1052 (Tinned), B.S.1470-HC14-T. S.96B, 1.59. B.S.409 (Annealed), B.S.1470-HS14-T, B.S.1471- HT14-T, B.S.1476-HE14-T.
	Black, white Black, white, green Black, white, red	S.92B. S.97A. S.97B.
	Black, yellow, black Black, yellow, blue Black, yellow, brown Black, yellow, green Black, yellow, red	L.65 (Solution and precipitation-treated). B.S.1470-81C-\frac{3}{4}H. B.S.1470-S1C-\frac{1}{4}H. L.65 (Not heat-treated), B.S.1470-S1C-\frac{1}{2}H. L.64 (Bars and billets for forging). Contd.

COLOURS	SPECIFICATIONS
Blue Blue, black, blue Blue, black, green Blue, black, yellow	L.49, B.S.1400-B5-1 (Ingots), B.S.1476-HE9-M. B.S.1470-NS3-0. B.S.1470-NS3-4H. D.T.D.736 (Section III), B.S.1477-HP10-WP.
Blue, brown Blue, brown, blue Blue, brown, red	L.48, B.S.1470-HS15-W, B.S.1471-HT15-W, B.S.1476-HE15-W. S.98B. S.106A, B.S.1471-HT15-WP, B.S.1476-HE15-WP.
Blue, green Blue, green, blue	S.99B. B.S.1476-HE9-W. B.S.1470-NS3-3H.
Blue, green, brown Blue, green, yellow	S.99A, B.S.1470-NS5-4H, B.S.1471-NT5-2H. S.98A, B.S.1470-NS5-0, B.S.1471-NT5-0, B.S.1476-NE5-M.
Blue, red, green Blue, red, white Blue, red, yellow	B.S.1432 (Medium hard), B.S.1433 (Medium hard), L.54, B.S.1476-HE9-WP. L.71. S.108A. B.S.1470-NS7-0, B.S.1471-NT7-0, B.S.1476-NE7-M.
Blue, white, blue Blue, white, yellow	D.T.D.627. B.S.1477-PlA-1H.
Blue, yellow Blue, yellow, blue Blue, yellow, green Blue, yellow, red	D.T.D.423 (Section III up to 6 in.). L.61. B.S.1470-NS4-H. D.T.D.703, B.S.1470-NS3-H.
Brown Brown, black, green Brown, black, red Brown, black, white Brown, black, yellow	B.S.1052 (Annealed), B.S.1470-HS10-W, B.S.1471-HT10-W, B.S.1476-HE10-W. B.S.1470-NS4-O, B.S.1471-NT4-O, B.S.1476-NE4-M. B.S.1470-NS4-½H, B.S.1471-NT4-½H. B.S.1477-P1B-½H. S.109A, B.S.1477-P1B-M.
Brown, blue, red Brown, blue, yellow	B.S.1470-SlA-12H. B.S.1470-SlA-0, B.S.1471-TlA-0, B.S.1476-ElA-M.
Brown, green, red Brown, green, white Brown, green, yellow	S.93A, B.S.1470-HS10-WP, B.S.1471-HT10-WP, B.S.1476-HE10-WP. B.S.1477-P1C-M. S.109B, B.S.1477-HPC15-W. C.92A, B.S.1477-HPC15-WP.
Brown, red Brown, red, green Brown, red, white Brown, red, yellow	B.S.1470-SIC-H, B.S.1471-TIC-H. S.106B, L.70 (As rolled). D.T.D.723 (Soft). D.T.D.725 (Section II).
Brown, white, red Brown, white, yellow	B.S.1477-PlC-½H. D.T.D.736 (Section II).
Brown, yellow, green Brown, yellow, red	D.T.D.713 (Soft), L.72 (As rolled). L.72 (Annealed).
Green, black, green Green, black, white Green, black, yellow	L.58, L.121, L.62. L.60, D.T.D.607. D.T.D.747 (Section II). L.70.

COLOURS	SPECIFICATIONS
Green, blue, green Green, blue, red	D.T.D.423 (Bars for machining greater than 6 in. Dia.), B.S.1434, B.S.1477-NP5/6-M. B.S.409 (Hard).
Green, brown, red	B.S.1477-NP4-M.
Green, red, yellow	B.S.1477-HP10-W.
Green, white Green, white, red	S.107. S.94B.
Green, yellow, green Green, yellow, red Green, yellow, white	B.S.1407. L.70 (Annealed), B.S.1471-NT7-1H. S.110A
Red, black, red Red, black, yellow	L.123. B.S.1432 (Annealed), B.S.1433 (Annealed), L.63. B.S.1470=HC15=W.
Red, blue, white Red, blue, yellow	D.T.D.747 (Section III), B.S.1477-HP14-T. B.S.1477-HPC14-T.
Red, brown, yellow	B.S.1477-HP15-W.
Red, green, red	B.S.1110, L.65 (Solution-treated only).
Red, white Red, white, yellow	S.93B. L.55, D.T.D.725 (Section III), B.S.1477-HP15-WP.
Red, yellow	B.S.1470-HC15-WP.
Violet	L.57.
White, brown, yellow	L.56.
1 77 - 77 Our Brancher Tro 1 1 Our	B.S.1449, En2C, L.50. B.S.1470-NS6-0, B.S.1471-NT6-0, B.S.1476-NE6-M. D.T.D.714, B.S.1470-NS6-\frac{1}{4}H, B.S.1471-NT6-\frac{1}{2}H. L.64 (Bars for machining and extruded sections). D.T.D.715.

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SCHEDULE III

COLOUR INDEX

Delete the following specification from the colours indicated:

COLOURS,	SPECIFICATIONS
Black, yellow, blue	D.T.D.303 (Rods).