

NML Approved Materials List

This document to be read in conjunction with the Design Schedule and prior consultation with the Design and Conservation Departments.

1 *Materials: Display Case Interiors - General Considerations*

- 1.1 All materials to be durable and maintainable.
- 1.2 All materials to be used within display cases to be inert and stable, proven for safe contact with objects without releasing corrosive or tarnishing vapour. All materials for case interiors to be selected from NML's approved list where possible. For any other materials not on the list, product data, samples (if required) and documented proof of material being passed 'Permanent' by Oddy Testing to be supplied to NML for evaluation. Oddy Tests of materials take a minimum of 4 weeks for a result. As some materials can fail material testing, ideally alternatives should be selected at the same time for testing along side, the production programme must take this time requirement into account.
- 1.3 Safety data sheets for all materials used should be approved by NML prior to manufacture. Safe use of materials on-site should be agreed with NML's Health & Safety Dept.
- 1.4 Minimum periods required for curing/off-gassing before installation of any materials into case:

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| • adhesives | 4 weeks |
| • glazing, water based paints + varnishes | 2 weeks |
| • sealants | 1 week |

2 Dress panels

2.1 Dress panel construction

NML approves four materials for interior construction. These panels should have sufficient load-bearing capacity for display of objects, staging and during installation (see Design & Display Case Schedules). Some additional support structure may be required under rigid PVC boards.

- **Forrex Classic™, white** PVC rigid board is preferred for use for dress panel construction, minimum thickness of 19mm for load bearing and structural requirements and in agreement with NML. This has the closest physical qualities to MDF but without any harmful off-gassing of pollutants, less dust from cutting and less impacts on health. (*Classic, white 5mm: BM Oddy Test Ref: 8019 – 16/09/2013*)
- **Forrex Color™** PVC rigid board provides solid coloured alternatives to the Classic board. Minimum thickness for baseboards of 19mm for load bearing and structural requirements and in agreement with NML. This has the closest physical qualities to MDF but without any harmful off-gassing of pollutants, less dust from cutting and less impacts on health.
 - (*Black, 3mm: BM Oddy Test Ref: 8018 – 16/09/2013;*
 - (*Blue, 3mm: BM Oddy Test Ref: 8058 – 16/09/2013;*

- *Dark Blue, 3mm: BM Oddy Test Ref: 8016 – 16/09/2013;*
 - *Dark Yellow, 3mm: BM Oddy Test Ref: 8011 – 16/09/2013;*
 - *Green, 3mm: BM Oddy Test Ref: 8018014 – 16/09/2013;*
 - *Grey, 3mm: BM Oddy Test Ref: 8017 – 16/09/2013;*
 - *Orange, 3mm: BM Oddy Test Ref: 8012 – 16/09/2013;*
 - *Red, 3mm: BM Oddy Test Ref: 8013 – 16/09/2013;*
 - *Yellow, 3mm: BM Oddy Test Ref: 80110 – 16/09/2013)*
- **Palram Palight™ (Standard, ref: ST), white only** PVC rigid board is an alternative for use for dress panel construction, minimum thickness of 19mm for load bearing and structural requirements and in agreement with NML. This has the closest physical qualities to MDF but without any harmful off-gassing of pollutants, less dust from cutting and less impacts on health. (*Palight ST-10: BM Oddy Test Ref: 8179 – 07/05/2014*)
 - **Foamalux™** is another alternative PVC rigid board being very similar to Forrex™ but with a slightly softer exterior surface layer. A minimum thickness of 19mm should be used for dress panels. This has similar physical qualities to MDF but without any harmful off-gassing of pollutants, less dust from cutting and less impacts on health.
 - **Metal panels** with powder-coated finish. Powder-coating system and process to achieve fully inert, fully cured finish. Adequate support structures should be provided beneath.
 - **Formaldehyde-free Medium Density Fibreboard** (e.g. ZF MDF): Where internal structures require greater load bearing strength, and in agreement with NML, may be approved if covered with a heat-sealed barrier film such as Moistop, wrapped with NML approved fabric or coated with four coats of Dacrylate™ Clear Glaze, Gloss, Ref: 103-1 (or agreed alternative) acrylic water based lacquer (non-V.O.C. emitting). Fabric should be fixed using approved tapes, and the barrier film over ZF MDF should not be punctured i.e. fabric should not be stapled. For tapes and adhesive film currently approved, see 6.1 below.
 - Alternate panel materials: Dibond, Lucabond or Hexlite may be used in certain circumstances, with prior approval from NML.

3 Dress panel textile coverings

- 3.1 Dress panel fabric should be fixed using approved tapes and/or staples may be used. Only tapes and adhesive film currently approved may be used (see Approved Tapes below). Where paints are used, as agreed with NML (see Display Case Schedule) these should be approved water based emulsion paints applied to a pre-“keyed” surface. Only primers approved by NML be used, where these are appropriate, for use on Forrex™ or Foamalux™ PVC rigid board and approved ‘Permanent’ by Oddy Testing and in agreement with NML

3.2 Internal plinth/staging construction

- 3.2.1 Forrex™ Classic or Palram Palight™ (Standard, ref: ST), white only, PVC rigid boards. NML approves and considers the use of these boards as the default choice for use for construction of staging and plinths. Minimum thickness of 19mm should be used for load bearing and structural requirements. The joining of side and top panels should be by

mechanical fixings only and not with the use of double sided tapes or adhesives unless these are approved 'Permanent' by Oddy Testing and agreed with NML.

- 3.2.2 Foamalux™ rigid PVC board may be used as an alternative to Forrex™ or Palight™, in agreement with NML. This inert board is similar to Forrex™ but with a slightly softer exterior surface layer. Minimum thickness of 19mm should be used for load bearing and structural requirements.

- 3.2.3 Only colours of textiles that have passed the Oddy Test will be considered for use (see Approved Textiles below). Where textiles which have not been Oddy Tested are desired for use, samples must be Oddy Tested no later than ten weeks before use in order to ensure that these will be safe for use with museum objects.

In some cases the objects being displayed may not be affected by any off-gassing of an untested textile or a textile that has only passed as 'Temporary' or 'Unsuitable'. In such a situation advice from NML conservators is required before hand for any such proposed use.

- 3.2.4 Formaldehyde free MDF (e.g. Medite 'ZF MDF') may only be used as per the Design Schedule and with prior agreement of NML. This must be covered with an impermeable heat-sealed barrier film such as Moistop or coated with four coats of Dacrylate™ (or agreed alternative) water based (non-V.O.C. emitting) acrylic lacquer, as agreed with NML, and wrapped with NML approved fabric (such as Baumann Unisono Series III). Fabric should be fixed using approved tapes, and the barrier film over ZF MDF should not be punctured i.e. fabric should not be stapled. For approved tapes and adhesive film see below.
- 3.2.5 Metal panels of mild or stainless steel with powder-coated finish may be used as per the Design Schedule and in agreement with NML. Surfaces should be properly degreased and corrosion free prior to powder coating. The powder-coating system and process must achieve fully inert, fully cured finish.

4 Tapes

These can also be used, where appropriate, for securing approved textiles over dress panels. The following tapes have been tested as safe for permanent use within display cases:

- Neshen Gudy 870 transfer adhesive (*BM Oddy Test Ref: 6852 – 08/06/2010*)
- Lahmann Lomacoll double-sided mounting adhesive 115H5G02, clear (*BM Oddy Test Ref: 6842 – 08/06/2010*)
- 3M 415 double-sided tape
- 3M 425 Scotch aluminium adhesive tape
- 3M 431 Aluminium adhesive tape (foil & acrylic adhesive) (*BM Oddy Test Ref: 7946 – 10/09/2013*)

5 Adhesives

These can also be used, where appropriate, provided they are allowed to off-gas in a ventilated space for at least 4 weeks :

- 3M Super 77 adhesive (aerosol), clear (*BM Oddy Test Ref: 7620 - 21/09/2012*)
- ***To be updated – more to be added based on Oddy Test results.***

6 Sealants

Silicone Sealants to be clear solvent and acid free sealants, unless otherwise agreed. Acetoxysilicones should **not** be used.

Current sealant approved for use within display cases:

- Dow Corning 935 ?
- Dow Corning 799 Silicone sealant (1 part), white (*BM Oddy Test Ref: 7680 – 18/01/2013*)

7 Textiles

7.1.1 Only textiles that have been approved by NML and that have passed Oddy Testing as 'Permanent' can be used.

7.1.2 The most commonly used textiles throughout NML have been Baumann Unisono III (currently series IV) or Ultra (currently series V). These are textiles of a consistently high quality although not all colours have passed Oddy Tests so approval should be sought for those that have passed as 'Permanent' for use or for other colours to be Oddy Tested early in the project development. Other textiles must be approved and agreed with NML before selection or use.

7.1.3 The colour of a dress fabric must be as per the Design Schedule and as agreed with NML. This should be fixed using approved tapes. Staples may only be used with prior agreement and only on approved non off-gassing boards such as Forrex or Palight. Only tapes, adhesive film and textiles currently approved may be used (see Approved Tapes above). Where the use of paints is agreed with NML (see Display Case Schedule), these should be approved water-based emulsion paints applied to a pre-"keyed" surface. Only primers approved and agreed with NML can be used (see Approved Paints below), and shown to be for 'Permanent' use by Oddy Testing will be accepted.

8 Paints & Other Coatings

8.1 Laquers

NML are now considering ending the use of Dacrylate lacquer as there is a growing body of evidence showing that this and similar water-based acrylic lacquers may be only 30% effective at best as a barrier.

~~Only water based acrylic lacquer can be used that has passed a 'Permanent' for use by Oddy Testing. See 4.1.4 above for use of Dacrylate™ (or agreed alternative) water based (non V.O.C. emitting) acrylic lacquer on ZF DF.~~

~~Adequate drying time between applications as recommended in the manufacturers instructions. Once application is complete a minimum period of two weeks is required for full drying and off gassing prior to installation within a display case.~~

~~The following water based lacquers are approved for use:~~

- ~~• Dacrylate~~

8.2 Paint Primers

To be updated – two currently being Oddy Tested

- Zinsser Bulls Eye 123 – Primer
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8.3 Paints

- 8.3.1 NML only approve the use of the following ‘Dulux Trade™’ paints which have been Oddy Tested by the British Museum and passed as permanent for use. Not all paint colours pass this test so there can be a lot of variation under the same paint type and brand name, some general colours can be more prone to failing due to some of the colorants mixed to achieve those colours. Some manufacturers can also change their formulations from time to time without notice so best practice is that paints are retested every five years.
- 8.3.2 Any paints that are not listed below and for which an Oddy Test has not been carried out will have to be tested by an independent Oddy Test service, as agreed with NML. Oddy testing takes 4 weeks for a result so alternatives may have to be selected in advance and tested as well if the preferred selected paint has failed the test.
- 8.3.3 Paints approved by Oddy Test as ‘Permanent’ for use (as of April 2018):

| Colour | Reference | Brand Name or Line | Supplier (S) Manufacturer (M) | Date (end of BM test) |
|------------|-------------------------------------|---|---------------------------------------|--------------------------|
| BEIGE | 30YY53125 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 04/01/2011 |
| BEIGE | S4030Y20R | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS (M) C BREWER & SONS (S) | 29/12/2014 |
| BLUE | 10BB08200 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| BLUE | 10BB11123 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 28/12/2012 |
| BLUE | 10BG39244 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| BLUE | 30BB08188 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| BLUE | 30BB08263 ATOMIC SURF 1 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS (M) C BREWER & SONS (S) | 14/11/2013 |
| BLUE | 30BG64072 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 01/02/2013 |
| BLUE | 5020B309 TARN | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS (M) C BREWER & SONS (S) | 07/05/2014 |
| BLUE | 50BB10112 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| BLUE | 50BG10175 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 28/12/2012 |
| BLUE | 50BG20230 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| BLUE | 70BG 56061 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 01/02/2013 |
| BLUE | 70BG 68056 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 01/02/2013 |
| BLUE | 70BG72086 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 01/02/2013 |
| BLUE | 83BB07202, PLUSH VELVET 1 RV2 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| BLUE, DARK | 5030R90B, HIGH TIDE | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 20/09/2010 |
| BLUE, DARK | 50GB08021 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 28/12/2012 |
| BLUE, DARK | 70BB07103 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 10/03/2011 |

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| BLUE, DARK | 70BG07086 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 28/12/2012 |
| BLUE, DARK | 90BG08075 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 28/12/2012 |
| BLUE, LIGHT | S0505B80G | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS (M) C BREWER & SONS (S) | 29/11/2014 |
| BROWN | 30YR07157, BITTER CHOCOLATE | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 10/03/2011 |
| BROWN | 30YY10038 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| BROWN | S7010R108 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS (M) C BREWER & SONS (S) | 29/12/2014 |
| CREAM | 30YY65171 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| CREAM | 40YY67087 BLEACHED LINEN | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 20/03/2012 |
| CREAM | 502YR50R | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 07/06/2010 |
| CREAM | RO2Y50R | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 07/06/2010 |
| GREEN | 30YY08082 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| GREEN | 40YY08107 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 22/03/2011 |
| GREEN | 40YY08107 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 10/03/2011 |
| GREEN | 70YY06088 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| GREEN | 90YY07093, TARRAGON GLORY 1 RG 1 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| GREEN | S5030B50G | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 29/12/2014 |
| GREEN, DARK | S7020B309 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS (M) C BREWER & SONS (S) | 29/12/2014 |
| GREY | 00NN13000 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 00NN25000 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 00NN31000 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 00NN53000 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 00NN72000 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 00YY47036 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 04/01/2011 |
| GREY | 10BB18106 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 20/09/2010 |
| GREY | 30BB10019 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 16/03/2011 |
| GREY | 30BB31043 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| GREY | 30RR17034 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 30YR22059 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 30YY14070 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |

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| GREY | 30YY20029 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 30YY33047 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 30YY56060 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 16/03/2011 |
| GREY | 34GY23002, RAL 7037 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 16/09/2010 |
| GREY | 40YY41054 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 16/03/2011 |
| GREY | 40YY51084 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 04/01/2011 |
| GREY | 50BG14036 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| GREY | 50YY47053 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| GREY | 5502B BATTLESHIP | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 07/06/2010 |
| GREY | 70YY27064 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| GREY | 70YY46053, GREY TOPE | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 10/03/2011 |
| GREY | 80YR50085 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 04/01/2011 |
| GREY | S1515R90B | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | LEYLANDS | 15/05/2015 |
| GREY | S1502R | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 02/10/2012 |
| GREY | S200250R | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 02/10/2012 |
| GREY | S7502R | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS (M) C BREWER & SONS (S) | 29/11/2014 |
| GREY, DARK | 00NN16000, ICE STORM 2 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 10/03/2011 |
| GREY, DARK | 47BB09031, RAL 7024 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/09/2010 |
| GREY, DARK | 82BG08029, RAL 7016 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/09/2010 |
| GREY, LIGHT | 10GG53030 HEBRIDEAN MISTS 4 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| GREY, LIGHT | 30BB45049 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| PINK | 50RR43228 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 04/01/2011 |
| PINK | Blush rambler 1, 50RR13343 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 22/12/2010 |
| PINK, DARK | 50RR15400 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 04/01/2011 |
| PURPLE | 10RB08125, AMETHYST FALLS 1 RV 3 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| PURPLE | 30RR08044 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| PURPLE | 50RB18149 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 04/01/2011 |
| PURPLE | 50RB27126 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 04/01/2011 |
| PURPLE | 70RB10157 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 22/12/2010 |

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| PURPLE | 70RB18117, MELLOW HEATHER 1 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 22/12/2010 |
| PURPLE | 70RB31090, MELLOW HEATHER 2 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 22/12/2010 |
| PURPLE, DARK | 70RB11196, HIMALAYAN MUSK | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 04/01/2011 |
| RED | 04YR11537 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 01/02/2013 |
| RED | 07YR10489 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 01/02/2013 |
| RED | 09YR11475 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 09/03/2011 |
| RED | 11RR07229 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) C BREWER & SONS (S) | 20/04/2012 |
| RED | 12YR07279 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 22/03/2011 |
| RED | 14YR10434, VOLCANIC SPLASH 2 RO 2 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| RED | 30YR11219 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| RED | 50YR09244, MEXICAN MOAIC 1 RG01 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| RED | 98RR06206 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/03/2011 |
| RED, DARK | 11YR07229, VOLCANIC SPLASH | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/09/2010 |
| RED, DARK | 13YR07157, HOT PAPRIKA | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 16/09/2010 |
| RED, DARK | 30RR12281 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS | 04/01/2011 |
| RED, DARK | HOT PAPRIKA 1 R03 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS (M) LEYLAND SDM (S) | 08/07/2013 |
| TURQUOISE | 16BG24357 BLUE DIAMOND 4 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| TURQUOISE | 90GG28133 SEA URCHIN 2 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |
| WHITE | 0500N JABOT | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS (M) C BREWER & SONS (S) | 07/05/2014 |
| WHITE | 10YY83071 | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 09/11/2011 |
| WHITE | 30BB72003 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 22/03/2011 |
| WHITE | 30BG72017, CLOUDED PEARL 1 FN 8 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 22/03/2011 |
| WHITE | 30YY51098, CHALKY DOWNS | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 22/12/2010 |
| WHITE | 30YY68024 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 22/03/2011 |
| WHITE | 30YY78018 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 22/03/2011 |

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|--------|----------------------------|---|---------------------------------------|------------|
| WHITE | 40YY65061 | DULUX TRADE VINYL MATT EMULSION, MEDIUM BASE | ICI PAINTS | 22/12/2010 |
| WHITE | 50BG72006 | DULUX TRADE VINYL MATT EMULSION, LIGHT BASE | ICI PAINTS | 22/03/2011 |
| WHITE | PURE BRILLIANT WHITE | DULUX TRADE DIAMOND EGGSHELL EMULSION | ICI PAINTS | 07/06/2010 |
| WHITE | PURE BRILLIANT WHITE | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 07/06/2010 |
| WHITE | S1502Y50R | DULUX TRADE VINYL MATT EMULSION | ICI PAINTS | 02/10/2012 |
| YELLOW | 19YY51758 EARTH GLAZE 4 | DULUX TRADE VINYL MATT EMULSION, EXTRA DEEP BASE | ICI PAINTS (M) C BREWER & SONS (S) | 16/01/2014 |

9 Object Mounts

9.1 Interface layers

Interface layers are used between the mounts/plinths and the objects to provide support, improve surface friction or prevent sticking to painted surfaces.

Materials to be used as required:

- Melinex sheet
- Plastazote (polyethylene nitrogen blown) foam, grades HD45, HD33, HD24, HD18
- Tyvek
- Silicon catheter tubing, Platinum cured (clear, wall thickness no more than 2mm). Used on armatures, rods or edges where they come into contact with objects surfaces.
- Stainless steel cabling must be coated e.g. Bowden cable (ferrules to be used), as per Design Schedule and to agreed safety standards for load-bearing.

9.2 Object mounts

9.2.1 The following materials approved for construction of objects, as indicated in the Design Schedule and agreed with NML:

- **Acrylic rod**, clear cast or extruded acrylic e.g. Perspex and generic equivalents. Colours and surface finishes as agreed with NML (see Design Schedule)
- **Acrylic sheet**, clear cast only e.g. Perspex and generic equivalents. Colours and surface finishes as agreed with NML (see Design Schedule)
- **Stainless steel (grade 304/316)** – as flat straps or rods as required. Brushed finish as standard. Surface finishes and coatings as agreed with NML (see Design Schedule)
- **Mild Steel**. Where this is required for heavier duty load-bearing mounts and brackets this should be finished in an approved paint coating for aesthetic consideration and to prevent surface corrosion. Where water-based paints are used a drying and off-gassing period of 2 weeks is required prior to installation. Where solvent paints are used, as agreed with NML, a period of 4 weeks is required for drying and off-gassing prior to installation. Colour should be as per Design Schedule and as agreed with NML.
- **Silicon catheter tubing**, Platinum cured (clear, wall thickness no more than 2mm). Used on armatures, rods or edges where they come into contact with objects surfaces.

9.2.2 Object support pegs. Set into holes within backboards or support surfaces to stabilise objects. These can either be:

- **Acrylic rod**, cast or extruded. As agreed with NML (see Design Schedule). Where Tensol 12 Acrylic Adhesive™ or similar solvent-adhesive is required for bonding acrylic to acrylic, a minimum off-gassing period of 4 weeks is required prior to installation.

- **Stainless Steel** with silicone rubber catheter tubing sleeve to provide protection, prevent scratching and bimetallic corrosion when supporting a metal object. As agreed with NML (see Design Schedule).
- **Silicon catheter tubing**, Platinum cured (clear, wall thicknesses up to 2mm). Used on armatures, rods or edges where they come into contact with objects surfaces.

9.2.3 Other object support fixings

- **Acrylic**. Where other supports surfaces are required, such as curved support lips, consideration should be made as to the use of additional fixings for load bearing, aesthetic appearance. Where Tensol 12 Acrylic Adhesive™ or similar solvent-adhesive is required for bonding acrylic-to-acrylic, a minimum off-gassing period of 4 weeks is required prior to installation.