

Q.D. PHOSPHATE HB 420 PRIMER

INTENDED USE

METAL FINISHING

STRUCTURAL STEEL PRIMER (factory applied)

For internal structural steelwork and applied at 75 microns dry film thickness. Has excellent sag resistance, and is easily brushed or rolled on structural steel profiles. May be used under intumescent coatings, subject to first checking that the intumescent suppliers data is in line with the industry standard, which is that it can be applied over 'a short oil alkyd primer'. Dries to an attractive low sheen finish unlike some competitor products which appear to be 'dead matt and dusty'.

GENERAL PURPOSE SHEET METAL

Economical quick drying primer for general purpose priming of sheet metal fabrications and steel work where cost is more important than gloss hold out and flow. If hold out and flow are important use Fast Primer.

ARTICLES - that are not part of a building structure (and are therefore outside the scope of the building products VOC Product Directive)

Used as a refurbishment or maintenance coating for items such as:

INSIDE BUILDINGS Machinery, fixed plant, moveable equipment, fork lift trucks, trolleys, frames, guards etc

OUTSIDE BUILDINGS: Exterior surfaces of tanks, pipework and process plant, towers, bridges or any structure which is not part of a building

See also the Manor supplementary information sheet 'Guide to the UK VOC legislation' to understand how the VOC content of a coating determines its suitability for use in any application.

SUITABLE SUBSTRATES AND PREPARATION

Untreated steel; for best results blast clean prior to painting to SA 2 1/2, otherwise manually abrade using powered hand tools and abrasives to ST2.

Previously painted steel; remove rust back to sound metal. Remove loose or flaky paint. Bring forward by patch priming. Sound previously painted surfaces should be lightly abraded prior to application in order to promote adhesion. Always perform a test area when applying over an unknown previous coating.

Remove dust. Remove oil or grease with Panel Cleaner. If using a waterborne degreaser remove fully. Test a small area prior to painting.

Aluminium and galvanised steel; abrade and pre-treat with Manor Mordant Solution, Manor Chromate Free Wash Primer or Manor 1 Pack Etch Primer in accordance with data sheets for these products.

Other substrates; seek advice from Manor Coating Systems Technical Department

AVAILABILITY

A matt finish in Buff, Grey, Red Oxide and Black in 5 and 20 litre containers

PRODUCT INFORMATION

Composition	Based on a modified alkyd resin, pigmented with suitably selected pigments, barrier extenders and modified zinc phosphate anticorrosive pigment.
Volume Solids	41-43%
Weight Solids	62-64%
VOC content	470-495 g/litre
Typical film thickness	75 microns dry and 180 microns wet film thickness
Theoretical coverage	5.6 sq metres/litre at 75 microns dry film thickness
Dry heat resistance	80 C
Flash Point	Within the range 21-31 C

APPLICATION DETAILS

PREFERABLY BRING PAINT TO 15-25C AND STIR WELL BEFORE USE

Airless spray:	cold	The product is supplied ready for use by airless spray. Typical tip size 15-21 thou or 0.40-0.54 mm. Typical fluid pressure 200 kg/sq metre or 2800 p.s.i.
	heated	As cold but maximum temperature 70 C
Conventional spray		Thin with up to 15% Industrial Thinner
Brush Roller		Not suitable for application onto large panels because of speed of dry. May be brushed / rolled onto structural steel or small areas where the profile and size do not require the wet edge to be picked up. If desired 5-10% thinners may be added. When applying by brush a lower film thickness (35-50 microns dry) is achieved. Do not overbrush. If brushing is the principal method of application consider using Manor Metal Primer which is designed for brushing.
Thinner		Industrial Thinner

Film thickness per coat

	<u>Dry</u>	<u>Wet</u>
Minimum	50 microns	120 microns
Maximum	100 microns	240 microns

DRYING AND RECOATING

Approximate drying times at 75 microns d.f.t.

<u>Substrate temperature</u>	<u>Touch Dry</u>	<u>Overcoating times</u>	
		Minimum	Maximum
10C	30-60 mins	12 hours	Normally overcoated within 28 c
20C	15-30 mins	6 hours	Normally overcoated within 28 c

Environmental conditions

The air temperature should be at least 5C with a surface temperature 3C above the dew point and the relative humidity below 80% thus ensuring that the surface is dry and that condensation will not occur during application or drying.

Drying will slow significantly at temperatures below 10C.

Do not apply in conditions below 5C

Do not apply to external surfaces if the forecast is for rain to fall within the next 4 hours.

In exposed windy conditions a minimum air temperature of 8 C is recommended.

Overcoating / repainting**IN SPRAY SHOP**

QD Phosphate HB420 Primer may be overcoated with Manor Fast Enamel. If left more than 3 days after priming it should be abraded to improve adhesion.

Alternatively QD Phosphate HB420 Primer may be overcoated with Manor Zinfos 250 or Zinfos 490 in light coats. If left more than 3 days after priming it should be abraded to improve adhesion.

ON SITE; INTUMESCENTS

QD Phosphate HB420 Primer may be overcoated with most intumescent coatings but check with the intumescent coatings manufacturers data sheet and perform suitable testing. Internal structural steel may be left up to 3 months prior to overcoating with suitable intumescent without any need to abrade.

ON SITE TOP-COATING

QD Phosphate HB420 Primer may be overcoated with Zinfos 340WS. If left more than 7 days after priming it should be abraded to improve adhesion.

SHELF LIFE

Store in cool, dry conditions, typically 5-25C. After a period of storage the product should be thoroughly stirred. Usable life is 2 years from date of manufacture in unopened containers.

**SAFETY
PRECAUTIONS**

Refer to Manor Safety Data Sheet

LIMITATIONS

The information given in this data sheet is based on experience and is accurate to the best of our knowledge. No guarantee should be implied however, since the conditions of use are beyond our control. This data sheet does not constitute a specification.

A Painting Guide can be accessed via our website which provides additional information on paint and painting and definitions of terminology.

In case of doubt as to the suitability of the product please consult our Technical Department. If you are advised that the paint can be used in a manner not specified on this datasheet our Technical Department will confirm this to you in writing. Do not use paint prior to receiving this confirmation.

References to other primers, topcoats, cleaners and thinners are to the Manor Product of that name only.

This data sheet supercedes all previous issues.

REFERENCES

Amended: 21/02/2024

Reference: QPHB Version: 12.0