

777-011

Duralon NY 90 Non Yellowing Gloss Finish (Hi Solids Polyurethane)

PRODUCT DESCRIPTION AND USES

Duralon NY 90 is a High Gloss aliphatic moisture cure polyurethane providing protection against the yellowing/darkening which occurs with standard aromatic polyurethanes subjected to UV light.

The use of a non yellowing finish on natural timber ensures the original timber colour is maintained for an extended period of time. This is particularly important with light timbers or where the floor is exposed to high levels of UV light due to the natural darkening (yellowing) of standard type polyurethanes.

NY 90 does not contain UV absorbers, therefore to prevent the bleaching effect of UV rays on timber or cork over long periods the use of 778-040 additive is strongly recommended.

Non Yellowing (aliphatic type) polyurethanes cure slower than standard types. They may also appear softer or slightly sticky to touch even when fully cured. NY has exceptionally good abrasion resistance.

Duralon NY 90 exhibits excellent flow during application and provides an attractive abrasion resistant silky finish.

Duralon NY 90 is ideal for use on timber, coloured cork, parquet, particle board and floors where a pastel colour has been applied.

Duralon NY 90 is not recommended for exterior use. Where an exterior non yellowing varnish/polyurethane is required, refer specification sheet 09.38 Alpha Varnish.

Polyurethanes produced by Protective Paints Ltd contain low free isocyanate levels and most do not contain Xylene providing a safer product for the applicator.

TYPICAL SUBSTRATES

Timber
Coloured Cork
Pastel Coloured Floor - Timber/Concrete
Parquet
Particle Board/Strand Board

PHYSICAL PROPERTIES

Colour/Texture	Clear/Gloss
Solids	52%
Reactive NCO	4.0%
Free Isocyanate	<0.04%

Taber Abrasion	16-18mg
Solvent	Ester/Aromatic Hydrocarbons
Flash point	41°C
Mixing Ratio	Not Applicable
Potlife	Not Applicable
Drying Time	Touch Dry: 3-4 hours (Ambient temperatures) Hard Dry: 12-16 hours (Ambient temperatures)
Recoat Time	Minimum: 12 hours
Full Cure	7-10 days
Packaging	1L, 4L, 10L, 20L

NB: A minimum of 48 hours should elapse before a freshly coated floor is subjected to light traffic.

Shelf Life

An unopened container has a shelf life of approximately twelve months from the date of manufacture. Once opened, the contents react with moisture in the air creating thickening and eventually solidification. This process may occur in as little as 24 hours or up to 6 weeks after opening depending on storage conditions. Ensuring the lid is replaced immediately after use will minimise exposure to air and therefore assist with storage stability.

Do not replace unused contents back into the container.

SURFACE PREPARATION

Proper surface preparation is essential to achieve a professional finish. Ensure all dust, dirt and other contamination is removed prior to coating.

New/Previously Uncoated

Coloured surfaces - Non yellowing finishes are extensively used for coating coloured timber/cork and therefore the sanding process is more critical as it must not remove the colouring.

Refer technical note 19 Coating Coloured Cork and technical note 14 Coating Bleached/Blonded Surfaces.

Natural Timber

The timber must be sanded to provide a surface which is smooth with a good 'key' for the coating system. Sanding procedures will vary depending of flooring materials however with most types of timber, a fine finishing paper can cause undesirable burnishing which may prevent good adhesion of the first coat (refer sanding guide).

Make several cuts with the sandpaper increasing paper fineness with each cut. The final cut should be no finer than 100-120#.

NB: For best results ensure not to increase more than 1 grit size per cut i.e. 24#-40#, 40#-80# etc.

Previously Sealed or Coated

Ensure compatibility of product to existing coating prior to application.

Poor Condition

If previous coating has worn through to the substrate the entire floor must be sanded back to bare substrate and treated as a previously uncoated surface.

A coloured surface should not be allowed to deteriorate to the point where bare timber/cork is exposed, as this will destroy the decorative nature of the floor. Where this situation has occurred, either the surface must be patched or preferably sanded back to bare timber. The bevelled edges on coloured cork make this process non practical.

Good Condition

Sand entire floor using a 150#-240# screen disc or paper. Vacuum entire area to remove dust, dirt etc. Refer Technical Note 2 Reglaze Procedure.

Concrete

Unsealed and untreated concrete must cure at least 30 days. Etch concrete using Protective Paints 736-080 Hydrochloric Etch and wash thoroughly with clean water to neutralise. Allow to dry thoroughly before application of coating system.

APPLICATION EQUIPMENT

Duralon NY 90 can be applied using a soft bristled (250mm-300mm) brush, 6mm mohair roller or applicator.

APPLICATION DATA

Recommended D.F.T	28 microns/coat
Recommended W.F.T	75 microns/coat
Recommended No. of Coats	2-3 (refer System Specification)
Theoretical Spreading Rate	8-10m ² /litre
Thinners	Portco 2K Thinners
Clean Up	Portco 2K Brushwash

NB: Brushwash inhibits the cure of the polyurethane, and it is therefore essential equipment is thoroughly dry prior to application of polyurethane. Brushwash must not be used to thin Duralon NY 90.

THINNING

NY 90 is supplied "ready for use and should not generally require thinning unless being utilised as a sealer. If product has thickened or is drying faster in warmer conditions, a small amount of 2K Thinners may be used to ease viscosity and extend wet edge.

Refer also Technical Note 9 - Coating in adverse conditions. Where Fina Glow is being used as a sealer on bare timber it should be thinned approximately 25% with 2K Thinners.

*It is recognised that although products are produced at the viscosity we feel is best for the intended purpose, applicators may have individual requirements that better suit their technique. Remember, as the coating is thinned, the solids, gloss and build of the product are reduced which may necessitate a further coat.

APPLICATION METHOD

Ensure moisture content of timber is between 12% -15% before polyurethane is applied. Ensure all dust and other contaminants are removed prior to coating.

On Bare Timber

(Excluding Particle Board and Strand Board) A diluted coat of Duralon NY 90 should be used as a sealer -refer details on thinning.

Apply Duralon NY 90 at a spreading rate of 8-10 square metres per litre using the recommended equipment. When floor is sufficiently dry (12-24 hours), sand the surface using a paper no finer than 150#.

Vacuum off carefully in order to remove dust from between boards and skirting areas. Repeat the procedure above until 3-4 coats have been applied.

A 240# disc can be utilised to sand the surface prior to the final application of Duralon NY 90.

Notes

Do not apply Duralon NY 90 when temperature or substrate is below 10°C, above 30°C or when it is extremely hot and dry.

Refer technical note 9 - Coating in Adverse Conditions.

Ensure dust masks are worn whilst sanding floor and organic cartridge mask whilst coating. Refer technical note 11 - Health and Safety.

Where quicker cure is required, refer specification sheet 778-020 MC Catalyst.

Where additional UV protection is required, refer specification sheet 778-040 UV additive.

SYSTEM SUMMARY

SUBSTRATE	SYSTEM	1ST COAT	2ND COAT	3RD COAT
Particle Board/ Strand Board	3 Day	777-011 Duralon NY 90	777-011 Duralon NY 90	777-011 Duralon NY 90
Timber/Parquet	2 Day	777-011 Duralon NY 90	777-011 Duralon NY 90	777-011 Duralon NY 90
(Natural)	3 Day	777-011 Duralon NY 90 (Diluted 25%)	777-011 Duralon NY 90	777-011 Duralon NY 90
Timber/Parquet (Coloured)	3 Day	777-011 Duralon NY 90 (Diluted 25%)	777-011 Duralon NY 90	777-011 Duralon NY 90
Coloured Cork	3 Day	777-011 Duralon NY 90	777-011 Duralon NY 90	777-011 Duralon NY 90
Concrete (Natural Uncoated)	3 Day	777-011 Duralon NY 90	777-011 Duralon NY 90	777-011 Duralon NY 90
Concrete (Coloured)	3 Day	777-011 Duralon NY 90 (Diluted 50%)	777-011 Duralon NY 90	777-011 Duralon NY 90

HEALTH AND SAFETY

Irritant

Avoid contact with skin and eyes. Avoid breathing vapour or sanding dust. When using this product it is recommended that full overalls, gloves, face mask and goggles be worn. Store container in a safe place when not in use. Do not burn container.

FIRST AID

EYES

Flush with water for at least 15 minutes and seek medical advice.

SKIN

Wash contact areas with soap and water. Remove all contaminated clothing, and seek medical advice. Do not scrub.

INHALATION

Remove patient from further exposure, and keep patient warm and comfortable.

INGESTION

Do not induce vomiting. Rinse mouth with water. Seek medical advice as soon as possible.

TRANSPORTATION AND DISPOSAL

Class

3

Hazchem Code

•3YE; •3Y

UN No

1263

Packing Group No

III

Fire Extinguishing Media

CO², Foam, Dry Chemical

Fire Fighting Procedure

Fire fighters should wear self contained breathing apparatus. Fight fire from a protected location as product may explode on heating. The vapours are heavier than air, so may travel along the ground to accumulate in low areas. Fire may flash back along vapour trail, and can also react with oxidising agents. Spills should be cleaned up immediately by using sand or other non-flammable absorbent materials. Ensure material does not enter waterways. Dispose of empty containers in accordance with local by laws.

OTHER INFORMATION

This product may be used for a wide variety of surfaces. If the surface you propose to paint is not referred to, contact Protective Paints Technical Department for classification.

For further technical information please phone 0800 724 684.

RELIABILITY OF INFORMATION

All statements and technical information contained herein are based on tests we believe to be reliable but the accuracy thereof is not guaranteed. Since Protective Paints Ltd has no control over product application, purchasers and users must confirm the suitability of our products under their conditions to meet their own requirements.

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