



High Performance Paint

Product Data Sheet



TUFF FLOOR WB POLYURETHANE

49-2XXX MAR 20



DESCRIPTION: TUFF FLOOR WB 2K POLYURETHANE is a 2 pack water based polyurethane topcoat with excellent toughness, adhesion, gloss retention and mar resistance. A highly durable coating suitable for medium to heavy industrial applications. With excellent adhesion and fast set-up time, this product is a replacement for solvent-borne polyurethanes with significant reduction in VOC emissions. Adopting European WB resin technologies, TUFF FLOOR WB 2K POLYURETHANE is formulated to be air-dried, and applied by brush, roller or spray.

TYPICAL USES: TUFF FLOOR WB 2K POLYURETHANE is designed to produce a topcoat with high durability, impact resistance and chemical resistance. TUFF FLOOR WB 2K POLYURETHANE is designed to go over properly prepared concrete, Epoxy flooring compounds and coatings and timber. See next page for general information or the relevant info sheet for specific application details. To achieve a smooth finish, spreading by speed rake, squeegee, or airless spraying is highly recommended. However, this product can also be applied by brush or roller over small areas.

PERFORMANCE: This is a premium 2K waterborne polyurethane top coat. TUFF FLOOR WB 2K POLYURETHANE is a waterborne coating that requires at least 24 hours to reach 80% of its final strength and 3-4 weeks to reach final strength. TUFF FLOOR WB 2K POLYURETHANE designed to withstand HACCAP cleaning protocols.

LIMITATIONS: This is a waterborne product, which is expected to be applied over well prepared surfaces. Depending on the conditions, the cure time may be extended; hence, it is important to protect painted surfaces to avoid any damage. Always mix well before use as the contents may settle.

TECHNICAL DATA:

Resin:	Polyurethane
Solvent:	Water
Finish:	Gloss (80+% @ 60°) Low Sheen (15-20% @ 60°)
Colour:	Clear/Full colour range
Touch Dry (minimum):	4 hours @ 25°C
Recoat Time (minimum):	Overnight @ 25°C
Primer:	See over
Number of Coats:	2-3
Dry Film Thickness:	55 microns
Wet Film Thickness:	150 microns
Durability:	Excellent
Thinning and Clean Up:	Water
VOC:	
Pot Life:	3-4 hours @ 25°C.
Mixing Ratio:	Gloss - 2:1 by weight Low Sheen - 5:1 by weight
Pack Size:	3, 9 Kg (clear), 4, 12 kg (Gloss white) 3.5, 10.5 kg (Low Sheen White)

SPREAD RATE:

Theoretical Coverage:	10-12 m ² /kg/coat.
Coverage depends on surface profile and porosity.	

COMPUTER CODES:

Tuff Floor WB 2K Gloss Accent	49-2715
Tuff Floor WB 2K LS Accent	49-2115
Tuff Floor WB 2K Gloss White	49-2700
Tuff Floor WB 2K Low Sheen White	49-2000

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Freedom from patent restrictions is not implied.

TUFF FLOOR WB 2K POLYURETHANE

SURFACE PREPARATION:

To ensure a successful application all surfaces to be coated must be degreased, clean and dry.

TUFF FLOOR WB 2K URETHANE is an excellent general industrial topcoat which offers superior toughness and abrasion resistance.

CONCRETE FLOORS:

New concrete should be allowed to cure for at least 28 days. A moisture test should be conducted after this time to assess the amount of moisture in the substrate.

Concrete MAY be considered dry enough to paint when moisture content readings are below 5.5% or relative humidity readings less than 70%. However these readings may only indicate what the surface of the concrete is doing and there may still be much more moisture than is suitable further into the concrete. A good test is to tape a 460 x 460mm sheet of 0.1mm plastic to various points around the job and leave for 16 hours. Any evidence of condensation under the plastic is a good indication that the concrete contains too much moisture.

Floor slabs that have been floated should be acid washed or lightly ground to remove the surface fines and cement rich layer as this is often weak and will break away when the coating is stressed. UHP water blasting will also remove this layer and well prepare the floor for painting but sufficient time must be allowed for the water to again dry out.

Highly polished floors can be coated but the coating may not be able to develop a high degree of adhesion, particularly if curing agents or silicate polishing agents have been used. These tend to inhibit the penetration of the coating and reduce the bond strength the paint can achieve.

Aged concrete floors will need to be cleaned and any in grained dirt or oils carefully removed. It is best practice to either acid was or lightly grind these older floors as the surface can become very hard and polished not allowing the paint to penetrate. It is also useful to do a moisture test as many older floor do not have adequate damp course and can be transferring significant amounts of moisture through the slab.

Excess moisture will cause delamination or blistering of the paint film at some stage and this can take many months to occur.

Tuff Floor WB 2K Urethane is ideal for application over Tuff Floor WB Epoxy as the finish coat to provide the required finished gloss level or colour. This system gives an extremely durable and high performance floor coating system for high demand areas.

WOODEN FLOORS:

New uncoated timber flooring will need to be sanded smooth. It is best to either use a sanding sealer (Cotec Sanding Sealer) or a thinned down (10%) mix of the TUFF FLOOR POLYURETHANE as a first coat to allow grain and fibre raising to be able to be sanded out with a fine paper prior to top coating.

Previously coated timber will need to be thoroughly cleaned and tested for the use of floor polishes. If the existing coating is sound then a hard sand to a fully a fully matt finish with fine paper is required. However, if the sanding “breaks through” to the timber in and patches this will show when re coated and it may be better to remove all the old coating anyway. Generally, it is better to sand back to bare timber and start again.

MIXING INSTRUCTIONS:

First, take TUFF FLOOR WB 2K POLYURETHANE Part A, and mix well for at least 60 seconds, using a wide paddle. Add Part B and mix well for at least 60 seconds, ensuring the sides and bottom of the pot are mixed in. Please note, the product will thicken when Part B is added and the viscosity will return to normal with small additions of water and continued mixing. Allow the mixture to stand for 5 – 10 minutes, this will allow the products to initiate their chemical reaction. Stir the mixture for further 1 – 2 minutes before commencing painting.

EACH GLOSS LEVEL HAS IT'S OWN SPECIFIC HARDENER SO DO NOT USE THE WRONG HARDENER.

TUFF FLOOR WB 2K POLYURETHANE is designed to be coated over various COTEC primers/sealers providing excellent weather, chemical and mechanical resistance. The following is a guide for coating some general surfaces.

APPLICATION:

See MIXING INSTRUCTIONS above, stir well before application. Product can be applied by brush, roller (8-12 mm Dacron) or air-fed/airless spray. This product can be “floated” onto the surface using a squeegee or speed brush applicator. Do not spread the paint out to a very thin layer as this can reduce the final film strength. Once the paint has covered the surface do not attempt to continue to work it or roll/lay off the surface, just leave it to settle and dry. The paint will have a uniform “milky” appearance when it is the correct film build and this is normal, it will dry to a clear finish.

THINNING & CLEAN UP:

Clean up with water and detergent.

ENVIRONMENTAL:

This formulation uses the latest technology with low toxicity, ensuring environmental issues are not compromised. DO NOT POUR paint or wash down storm water or water courses. ALWAYS dispose of in accordance with local Government regulations. Soak up spills with absorbent material and dispose of properly. If spraying use suitable respiratory protection. Refer to the MATERIAL SAFETY DATA SHEET.