
TRU LEVEL TUFF TOP

Self-Smoothing High Performance Cementitious Overlay for Internal/ External Application

DESCRIPTION

Tru Level Tuff Top is a specially formulated floor leveling compound designed to achieve a smooth flat surface for application of tiles, vinyl timber floors and floating floor systems.

Tru Level Tuff Top is designed as a stand alone overlay for internal / external application

RECOMMENDED USES

- As a high performance underlayment for vinyl, tiles, timber floors
- As a final wearing course overlay
- Reinstatement of uneven concrete slabs/ floors
- Leveling defective concrete that does not meet requirements of after trades such as vinyl, tiles, timber
- Rapid repairs with minimal down time
- Use in commercial, domestic and industrial applications as an overlay
- Driveways
- Internal or external applications

FEATURES AND BENEFITS

- Rapid drying accepts foot traffic in 3-4 hours
- Accepts vehicle traffic in 4-8 hours
- Ready to use- simply add water and mix
- Large areas can be reinstated in relatively short time periods
- Eliminates need for sand/ cement screeds
- Can be applied from 5mm – 30mm in a single application
- Large area can be applied with no cracking or delamination
- Floor coverings and coatings can be applied 24 hours after application
- Application of Aftek coating systems can be applied after 24 hours
- Hard wearing (durable, high abrasion resistant)

APPLICATION INSTRUCTIONS

All surfaces must be clean and free from grease, oil, paints sealers, curing compounds, dust or any material that will affect the bonding capabilities of the primer/leveling compound.

Foreign material such as bitumen, adhesive or coatings such as epoxy must be removed via mechanical means such as scabbing, captive shot blasting or grinding followed by vacuuming to remove dust and dislodged material.

If large holes and cracks are present fill with Tru Level Tuff Top mix with equal portions medium grade dry sand (Epilox F6 or F4 Fillers are preferred).

All substrates must be primed with Level Hard Primer. Ensure concrete slabs are at least 14 days old prior to application of Tru Level Tuff Top.

Priming-

Prime all prepared areas with Level Hard Primer using a roller, brush, broom or spray application. Level Hard Primer is supplied in a ready to use form.

DO NOT DILUTE WITH WATER

Apply Level Hard Primer at a coverage rate of 5-7 square meters per litre.

For extremely porous substrates a second coat of primer may be required to eliminate air bubbles, pinholes and adhesive issues that may arise due to insufficient primer.

For very dense and non-porous substrates such as burnished concrete surfaces, it is recommended that Primeseal be used as the primer.

For additional information contact Aftek-ITLS.

Concrete Surfaces with High Moisture Content-

For concrete surfaces that contain a moisture content of greater than 5% moisture or relative humidity greater than 75% or surfaces subject to rising damp or moisture due to hydrostatic pressure, it is recommended that Primeseal MC be used prior to application of Tru Level Tuff Top.

A minimum of two coats of Primeseal MC must be used. Allow the first coat of Primeseal to cure before applying the second coat. Refer to Technical Data Sheet for Primeseal MC prior to application.

Mixing-

Tru Level Tuff Top requires 4.5 – 4.7 litres of water per 20kg bag.

Accurately pre-measure the required water and add to the mixing bucket. Slowly add powder to the water whilst continuously mixing. Using an electric mixing drill with a high shear stirrer or a spiral mixing paddle mix the contents for 3-4 minutes ensuring a uniform homogenous consistency is obtained.

DO NOT MIX BY HAND.

DO NOT ADD EXCESS WATER: WATER LEVEL OF GREATER THAN 4.7 LITRES PER BAG WILL RESULT IN SEGREGATION AND BLEED AND A POWDERY SOFT SURFACE

Tru Level Tuff Top may be applied using a continuous automatic pump such as a Putznecht or Putzmeister.

(Consult Aftek-ITLS for additional information)

Only mix the quantity of material that can be used within the working time of the material.

Apply the Tru Level Tuff Top immediately after completion of mixing. Ensure subsequent mixers are ready to allow for continuous uninterrupted pouring onto the entire surface.

DO NOT REWORK OR RETEMPER ANY PARTIALLY SET PRODUCT. DISCARD ANY MATERIAL THAT HAS STIFFENED, HARDENED OR CURED.

Application-

Apply the mixed Tru Level to the prepared and primed substrate using a trowel, squeegee or screed bar to give the required finished thickness.

The maximum thickness applied in any application should be limited to 30mm. Consult Aftek technical staff for thicknesses greater than 30mm.

The minimum application of Tru Level Tuff Top as a wearing course is 5mm.

Curing-

The application of a curing membrane or water is not necessary.

TYPICAL PROPERTIES			
Appearance	Light grey powder/Light grey when cured		
Fresh wet density	1900kg/m ³		
Application Temp	Minimum Maximum	5° C 30° C	
Setting Times	Initial	20° C	40 min
	Initial	30° C	25 min
	Final	20° C	55 min
	Final	30° C	35 min
Application Thickness	5 – 30mm single application Minimum application for vehicle traffic interior/ exterior is 5mm		

COMPRESSIVE STRENGTH		
Age (Days)	Compressive Strength MPa	Flexural Strength MPa
1	12	4
3	18	5
7	27	9
28	35	10.5

WORKING TIME			
Temperature °C	Time Minimum	Foot Traffic Time	Time to cover with floor covering or coating
5	60-70	10-12 hrs	48 hrs
10	55-65	5-7 hrs	48 hrs
15	45-55	4-5 hrs	24 hrs
20	35-40	3-4 hrs	16 hrs
30	25-35	2-3 hrs	8 hrs

COVERAGE/YIELDS	
Coverage obtained using 4.7 litres water per 20kg bag	
Thickness	Area per m ² per 20 kg bag
5mm	2.6
10mm	1.3
13mm	1.0
15mm	0.87
30mm	0.43

A 20kg bag of Tuff Top will yield 13 litres

BOND STRENGTH	
Age (Days)	Strength MPa
7	> 7
28	> 12
Tested to ASTM C882-1987, Slant shear method.	

PACKAGING

Tru Level Tuff Top is supplied in 20kg poly lined bags- Item No. 430090

Level hard Primer is supplied in 5 and 20 Litre containers.

STORAGE SHELF LIFE

Tru Level Tuff Top has a shelf life of 9 months if stored in the original sealed packaging in dry, low humid environments.

PRECAUTIONS

- Tru Level Tuff Top is used as an overlay or underlay, but must not be subjected to total water immersion
- Do not add excess water
- New concrete must be minimum 14 days old
- Do not use in areas subject to hydrostatic pressure
- If moisture content of slab is greater than 5%, apply Primeseal MC (moisture barrier) prior to application of Tru Level Tuff Top
- Do not allow Tru Level Tuff Top to come into contact with water before or after the cure process
- If substrate over which Tru Level Econo Pro is applied moves or cracks, reflective cracking will occur
- Do not apply Tru Level Tuff Top over expansion or construction joints as cracking may occur
- Do not apply Tru Level Tuff Top in direct sunlight or drying winds as pre-moisture dry will occur and possible cracking may occur
- Always use mechanical mixing to mix the Tru Level Tuff Top
- Feather edging should be kept to a minimum
- Allow a minimum of 3 days cure at 20° for internal/ external application prior to subjecting to vehicle traffic
- Do not apply point loading on any area of the floor as cracking may occur. This will be predominant in sections less than 5mm thick
- For heavy duty traffic, it is recommended that a minimum of 15mm of Tru Level Tuff Top be applied
- Apply floor coating- Epoxy, Acrylic or Urethane 24 hours after final cure
- For external application, recommended a surface sealer be applied to improve stain resistance

For more detailed information, please read the MSDS for this product

ABRASION RESISTANCE	
Age (Days)	Wear Index
7	315
28	410
Tested to ASTM C501-1984, taber abrasion. * 30 MPa concrete has a typical abrasion wear index 90. * Typical ceramic tiles have an abrasion wear index 160.	

CLEAN UP

Wash all tools and equipment with fresh, clean water immediately after use. Tru Level Tuff Top can only be removed mechanically.

HEALTH AND SAFETY

Avoid contact with skin. Protective gloves and clothing are recommended when mixing or using this product.

Please refer to full MSDS (material safety data sheet) for this product, which is available from Aftek upon request or through www.aftek.com.au

TECHNICAL SUPPORT

Aftek manufactures a comprehensive range of high quality and performance construction products. In addition, ITLS offers technical support and on-site advice to specifiers, end users and contractors.

Please contact your ITLS-Aftek sales representative or Head Office for this service.

The information and any recommendations relating to the application and end-use of all ITLS products are provided in good faith based on ITLS's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by ITLS. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions. PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.