

# ENDURACRETE TC

## TECHNICAL DATA SHEET

4 Pack Polyurethane Concrete Coating



A & I Coatings ENDURACRETE TC is a 4-pack pigmented, solvent free, 100% solids Polyurethane Cement Coating. It has excellent surface hardness and adhesion. It can be applied as a stand alone coating or as part of the Enduracrete SR system.

<b>USES &amp; BENEFITS</b>	<ul style="list-style-type: none"> <li>• Concrete protection • Food and Beverage Processing Floors • Commercial Kitchens • Commercial Bars</li> <li>• Loading docks • Manufacturing Facilities. • Secondary Containment areas • Economical Coating system</li> <li>• Top Coat for the Enduracrete SR system.</li> </ul>																						
	<b>Benefits</b> 1. Exceptionally hard wearing 2. Can be applied to Concrete up to 10% moisture PBW.(7 days generally) 3. Coefficient Thermal expansion very similar to host concrete 4. Fast Cure and return to service 5. LOW Odour and NON DG	<b>Limitations</b> 1. Minimum surface temperature should be at least 3° C above dew point. 2. Not UV Stable. (Can be overcoated with suitable UV stable finish-contact A&I Coatings) 3. Not available in Gloss-Only available in Low Sheen																					
<b>PHYSICAL PROPERTIES</b>	Vehicle Type	Part A Water dispersed Polyurethane, Filler C-Cement/Lime/filler																					
	Hardener	Isocyanate																					
	Mixing Ratio	Part A 3kg, Part B 3kg, Part C Filler 4.5kg, Part D colour 0.18kg - 10.68kg kit																					
	Finish	Low Sheen																					
	Theoretical Coverage	Dependant on surface from 0.35kgm <sup>2</sup> -0.8kgm <sup>2</sup> /coat																					
	Volume Solids	100%																					
	Recommended Thickness	0.3kg/m <sup>2</sup> per coat as a stand alone coating. Minimum 2 coats required as a stand alone coating																					
	Compressive Strength	>50Mpa																					
	Primer Required	Not for concrete, can be applied direct.																					
	Pot Life/Work Time	7 minutes at 25°C (once product dispersed on floor). If left in bulk will exotherm quickly																					
Thermal Expansion Coefficient	ASTM C531 5.8 x 10 <sup>-5</sup> /°C																						
Product Weight	1.5Kg/Litre 10.68kg kit delivers 7.1 Litres product																						
<b>ENGINEERING DATA</b>	Abrasion Resistance	EN 13892-4 - AR 0.5																					
	Chemical Resistance	Enduracrete TC displays resistance to many common chemicals in spill or splash situations at ambient temperatures. The following chemicals are an example only. Consult A&I for specific applications. <table border="0"> <tr> <td>• Hydrochloric Acid (10%)</td> <td>• Motor Oil</td> <td>• Grease</td> </tr> <tr> <td>• Nitric Acid (10%)</td> <td>• Kerosene</td> <td>• Organic Food Matter</td> </tr> <tr> <td>• Sulfuric acid (40%)</td> <td>• Turpentine</td> <td>• Wine</td> </tr> <tr> <td>• Uric acid (concentrated)</td> <td>• Skydrol</td> <td>• Diesel</td> </tr> <tr> <td>• Sodium hydroxide (10%)</td> <td>• Hydraulic Fluid</td> <td>• Hydrocarbon solvents</td> </tr> <tr> <td>• Hydrogen peroxide (3%)</td> <td>• Brake Fluid</td> <td></td> </tr> <tr> <td>• MEK</td> <td>• Toluene</td> <td></td> </tr> </table> Some chemicals may cause surface staining from prolonged exposure without impacting the coating integrity. Data is available on request. Exposure based on spill and splashes cleaned within 24hrs	• Hydrochloric Acid (10%)	• Motor Oil	• Grease	• Nitric Acid (10%)	• Kerosene	• Organic Food Matter	• Sulfuric acid (40%)	• Turpentine	• Wine	• Uric acid (concentrated)	• Skydrol	• Diesel	• Sodium hydroxide (10%)	• Hydraulic Fluid	• Hydrocarbon solvents	• Hydrogen peroxide (3%)	• Brake Fluid		• MEK	• Toluene	
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Dry Heat Resistance	Up to 120°C																						
Wet Heat Resistance	Up to 70°C as a stand alone coating and 90°C as part of Enduracrete SR system																						
Solvent Resistance	Excellent for many solvents																						
Durability	Excellent, but will chalk under UV exposure without damage to the integrity of the coating																						

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CURING DATA	Substrate Temp.(°C)	Light Foot	Light Vehicle	Heavy Vehicle	Full Cure
	25°	12hrs	24 hrs	48hrs	7 days
A minimum 10 hrs at 25 degrees C required between coats of Endurafloor TC. Earlier overcoating can cause blistering. Maximum overcoating time between coats is 36hrs at 25°C.					
SURFACE PREPARATION	Concrete	New concrete should be allowed to cure to be at below 10% Moisture content PBW. Concrete should be sufficiently hard to support mechanical preparation (7 days generally) Surface must be sound, dry, free from all loose material, laitance, old coatings, dust and surface contaminants (e.g. oil, grease, chemicals, release/curing agents etc. Concrete must be mechanically treated by abrasive blasting or coarse grinding to achieve a clean anchor pattern for best adhesion-ICRI SP2-3 minimum. Concrete must have an effective damp proof membrane and concrete must be free from rising moisture. Concrete to be minimum 25Mpa compressive strength and 1.5Mpa pull off strength.			
	Mixing	1/Mix Part A and D Colour into a mixing Pail and mechanically mix for 30 seconds 2/ Add Filler C and mix for 90 seconds using mechanical mixer.Ensure an even lump free consistency is achieved. 3/Add Part B hardener and mechanically mix for 90 seconds until smooth lump free consistency achieved. Ensure mixing is to bottom,sides and top of Pail to achieve consistency. Once mixed, pour the complete contents on to floor to maximize working time.			
APPLICATION DATA	Application	Rubber Squeegee and 10-12mm nap roller			
	Thinning	Not permitted			
	Cleaning	Xylene or Acetone			
	Application Limits	Apply product between 8-30°C and ensure substrate is 3°C above dew point at time of application and initial cure			
PACKING & STORAGE	Packing	10.68kg kits			
	Storage	9 months if stored in sealed containers away from heat and moisture			

All applicable statutory regulations must be observed in the application of this product. Users must first read the Safety Data Sheet for Enduracrete TC Users should familiarise themselves with all the safety aspects of the product prior to use. Please ensure the current Technical Data Sheet is consulted prior to specification or application of A & I Coatings products. A & I Coatings will in many instances provide Area Specific Instruction Sheets which contain detailed instructions on how to achieve desired results for specific areas. If the surface intended to be painted differs from the specification, please consult the A & I Coatings Technical team on 1800 819 585.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation. Note: The figures quoted for pot life and drying/curing times are not definitive. They are dependent on onsite conditions, such as volume of material mixed, ambient and substrate temperatures, weather and ventilation. **DISCLAIMER** Since the use and application of this product is beyond our control, we cannot be held responsible for product field performance. The information presented above is the result of our considerable experience with this product but is not to be construed as a performance warranty. For additional information, phone our Customer Service Centre on 1800 819 585, or e-mail [helpdesk@aicoatings.com](mailto:helpdesk@aicoatings.com) Visit our website for more products: [www.aicoatings.com](http://www.aicoatings.com)



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