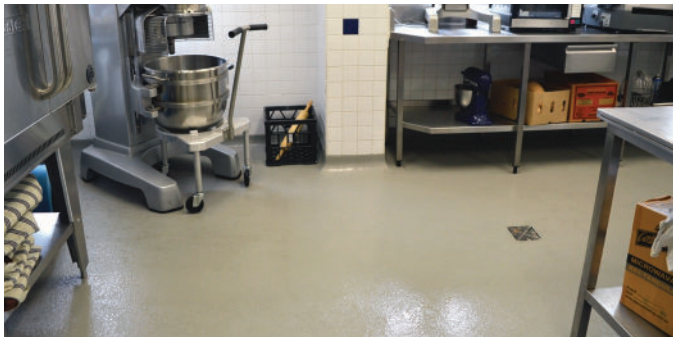
ENDURACRETE SR

SYSTEM DATA SHEET

Slip resistant Polyurethane Concrete Hybrid Flooring System

A&I COATINGS



TECHNICAL SNAPSHOT

COMPRESSIVE STRENGTH
>50Mpa

SHORE D HARDNESS
80 after 28days

IMPACT REISSTANCE
EN 13813 > 4 Nm (IR4)

ABRASION RESISTANCE
EN 13892-4 - AR 0.5

BOND STRENGTH TO CONCRETE
> 1.5Mpa

DRY HEAT RESISTANCE
120°C

HOT WATER RESISTANCE
90°C at 5-6mm build

VOC
<140G/L meets Green Star requirements

CHEMICAL RESISTANCE
Enviroset 4113 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.

- Hydrochloric Acid (10%)
- Nitric Acid (10%)
- Sulfuric acid (40%)
- Uric acid (concentrated)
- Sodium hydroxide (10%)
- Hydrogen peroxide (3%)
- Motor Oil
- Toluene
- Brake Fluid
- Skydrol
- Organic Food Matter
- Grease
- Wine
- Diesel
- Hydrocarbon solvents

Some chemicals may cause surface staining from prolonged exposure without impacting the coating integrity. Data is available on request.

FEATURES & BENEFITS

- Can be applied to concrete with Moisture up to <10% PBW. Generally after 7 days
- Good Thermal Shock resistance
- Excellent chemical resistance to organic food matter
- P3-P5 Slip resistance options
- Excellent impact resistance
- Dual curing mechanism of polymer crosslinking and cementitous hydration
- Resurface badly worn Concrete
- Quick cure and return to service
- NON DG Formulation
- Taint free and able to be used in Live Production
- Can be rendered UV Stable.(will limit use in Live Production)

TYPICAL USES

- Food and Beverage Processing facilities
- Commercial Kitchens
- Bars
- Secondary Containment Bunds
- Freezers
- Heavy Manufacturing

PREP AND SUBSTRATE REQUIREMENTS

- Suitable substrates are concrete and mineral based substrates.
- Substrate to be minimum of 25Mpa compressive strength and 1.5Mpa tensile strength.
- Substrate must be free of rising moisture and must have an effective damp proof membrane beneath.
- Substrate moisture to be less than 10% PBW.
- 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 suitably keyed to ensure good coating adhesion. This can be achieved by diamond grinding or shot blasting to minimum ICRI CSP 3 level on the prep.
- Remove all loose matter through vacuum cleaning.
- 6mmx6mm anchorage saw cuts to be installed to concrete 75mm in from all perimeters,terminations,penetrations and drainage points.

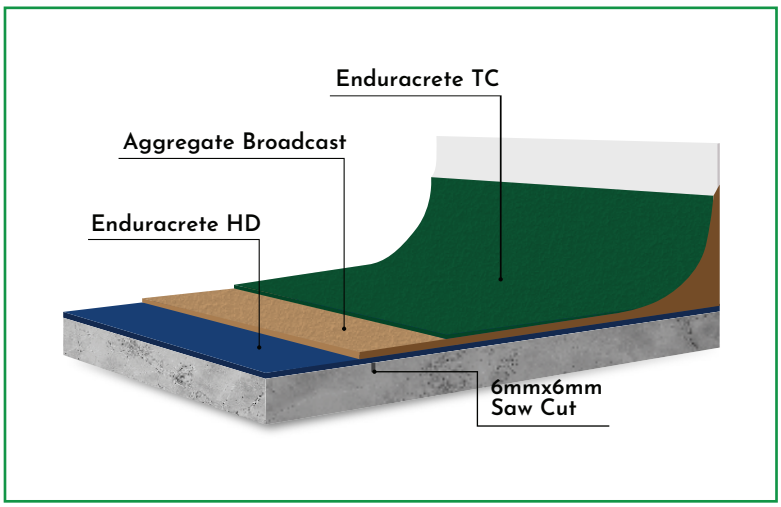
ATMOSPHERIC REQUIREMENTS

- Substrate surface temperature to be 3ºC above dew point during installation and initial set
- Below 85% RH
- Application temperature between 10 – 30ºC

SYSTEM BUILD UP refer to individual product sheets for detailed product information.

APPLICATION:

- Base Layer: Install Enduracrete HD by Pinrake and trowel to 4mm thickness/7.6kg/m2.
  (Very porous or damaged concrete may require a scratch coat of Enduracrete HD at 1.9kg/m2 to minimize outgassing. Alternatively Enduracrete TC can be used at 0.3kg/m2.)
- Broadcast Layer: Whilst Enduracrete HD is wet(within 15mins at 25degrees C) broadcast kiln dried aggregate to refusal-4-5kg/m2. Aggregate to be 800microns-1mm in size.
  Allow to cure 10-12hrs at 25degrees C
  Sweep and Vacuum excess aggregate
- Top Coat: Apply Enduracrete TC at a coverage rate of 0.7kg/m2 by squeegee and 12mm nap roller.
  (A second topcoat can be applied for a less textured surface at 0.35kgm2 ensuring not to overfill the surface.This may reduce slip resistance so confirm site requirement)



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CURING TIMES

	Light Foot	Light Wheeled Traffic	Heavy Traffic	Full Chemical and Physical Cure
22°C	12hrs	24hrs	48hrs	7 days

FOR SPECIFIERS

SPECIFY:

"Floor System to be Enduracrete SR Polyurethane floor as manufactured by A&I Coatings P/L."

	Thickness	Slip Rating	Colour	Finish
OPTIONS	5-6mm	Select from P3-P5 as required	Standard Range	Low Sheen

STANDARD COLOURS:

IMPORTANT NOTES

- For consistent colouration, ensure the colour is from the same batch over the course of the project.
- Any expansion joints must be reflected through the system and filled with a flexible joint sealer after system application.
- Any dynamic crack movement may transfer through the floor system and result in a visual crack on the surface.
- The coverage rates listed above on this system data sheet can vary depending on the quality of the substrate. Conduct site tests to verify.
- If any doubts exist on the suitability of the substrate, it is recommended a site test be conducted.
- Enduracrete SR is a performance coating system and is not UV stable. Colour shift can occur within this system which does not effect the performance. For a UV stable or higher aesthetic requirement contact A&I Coatings to determine suitable finishing coat option.