

waterproof & fireproof

- **Longer Life Expectancy:** Wearing as a result of friction is 1/3rd of the normal use and less than 1/2 of the heavy duty use of conventional concrete, resulting in a LONGER LIFE EXPECTANCY. Axion TuffCrete gets progressively stronger with each passing year. Unlike conventional concrete that gets weaker and cracks with time.
- **Total Decorative Control:** Axion TuffCrete can be moulded into any shape and colour.
- **More Durable & Weather Resistant:** Axion TuffCrete gets stronger with each passing year because it's exclusive organic polymer starts evaporating at 180°C i.e. it does not evaporate. It stays active in every ion of the Axion TuffCrete mix making it more durable and weather resistant for years to come.
- **Asphalt Layers Can Be Added To It:** Add asphalt layers in the normal traditional way.
- **Not Affected By Oil And Fuel Spillage:** All this allows for building roads, airplane loading areas, parking areas, gas stations, refueling areas, etc. without fearing damage caused by oil, and fuel spillage
- **Repair Old Damaged Concrete:** Repair old damaged concrete, swimming pools, water storage tanks, buildings and sewage systems. Superior compressive strength with no aggregates or reinforcement required. Will bond directly to existing unsealed concrete and indigenous earth materials. Up to ten times stronger adherence to steel rebars than conventional concrete. Can be applied as shotcrete, or by roller or trowel. Can be colored with Axion exclusive colours.



AXION TUFFCRETE
WATERPROOF POWDER



AXION TUFFCRETE
LIQUID POLYMER

Directions For Mixing

- 1L(Tuffcrete Polymer): 400L water
25KG (Tuffcrete powder) :50kg Portland cement.
- Axion Tuffcrete Cubic Meter Mix Design (1000kg Silica Sand , 200L diluted Polymer, 350kg Portland Cement and 150kg Tuffcrete Powder) to form a concrete which is stronger than the traditional concrete and waterproof.
- You do not need to add aggregate to your concrete mixture because using only Axion Tuffcrete Powder gives you a rock solid waterproof concrete which exceeds the load bearing capacity of traditional concrete mixture giving you a solid concrete which is waterproof, fireproof, anti-fungi and salt resistant.
- You can also apply Axion Tuffcrete Oxide to achieve any colour you want. It is waterproof, weather proof and never changes colour.
- To use sand & cement additionally for plastering, you would add just 20% of Axion Tuffcrete Powder and use the already diluted Axion Liquid Polymer for mixture
- You can also apply Axion Tuffcrete Oxide to achieve any colour you want. It is waterproof, weather proof and never changes colour.

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AXION

AXION GLOBAL ENGINEERING LIMITED



A Subsidiary of Axion Canada

Axion Tuffcrete.....Water proof power

Water proof, Fire Proof, Solid Concrete, Salt Resistant, Anti-Fungi, Permanently Colored



Concrete Road



Stamped Concrete Road

Email: sales@axioncanada.com
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Waterproof Storage Tanks and Sewage Treatment Plants

They can be built directly on the stabilized dirt using a minimum amount of steel rebar's. **Axion TuffCrete** weighs 40% less than conventional concrete and is not affected by the hydrogen sulphide caused by sewage gases.

Interlock and pavers

Axion TuffCrete Pavers come in many shapes and designs in a variety of colors to suit different tastes with a marble like finish. They are the only waterproof pavers in the world with more load bearing capacity. They last longer, resulting in substantial savings. Unlike conventional pavers that deteriorate with time due to different weather conditions **Axion TuffCrete** pavers are easy to install and resist the exposure to water, different weather conditions, chemicals and salts and last longer.

Hospital

Unlike conventional concrete **Axion TuffCrete** has no pores that allow for bacterial growth making it the ideal choice for hospitals and all types of buildings. You can mortar, waterproof, fireproof, and paint in one easy step resulting in both quality and cost savings.

Buildings

Axion TuffCrete is revolutionizing the world of construction, saving time and effort, labor and raw materials, and cost. Steel rebars are protected from corrosion and erosion because **Axion TuffCrete** is waterproof. **Axion TuffCrete** Advanced Technology allows you to:

- Mortar, Waterproof, Paint (as it can be coloured).

All in one easy step. Save over 40 %.

Bridges

- Depending on the required specification **Axion TuffCrete** comes in many design mixes that range in load bearing capacities from

400 kilos per sq.cm up to 2000 kilos per sq.cm.

- Its high degree of flexibility helps protect against earthquakes and earth tremors
- Because it is waterproof it protects steel rebars against rust and corrosion. It is fireproof & waterproof.
- It weight's 40% less than conventional concrete resulting in 40% savings in the amount of the steel rebars required.

Swimming Pools and Canals

Axion TuffCrete is waterproof. It has more load bearing capacity than conventional concrete. It has more flexibility than steel reinforced concrete and adheres to stabilized dirt. This allows you to build better quality swimming pools without the use of: Steel rebar, Water proofing, Ceramics, Aggregate. This pool's colour is molded in the Axion TuffCrete itself. Ground water storage tanks and sewage tanks can be built the same way. **Axion TuffCrete** has no pores so it does not allow the growth of algae in its walls resulting in 50% savings in chemical water treatment cost. **Axion colors** are steady fast and are not affected by different weather conditions. They never fade.

Basements & Roofs

- Waterproof basements and roofs, old and new

Pre-Finished Bricks

- Axion TuffCrete Can be manufactured in all shapes and colors, with more load bearing capacity, resists chemicals, salts and water deterioration, plus they weigh less.

Gas Stations

- Conventional concrete deteriorates due to fuel spillage, chemicals and salts. Axion TuffCrete is both chemical and salt resistant.

Road Maintenance

- It can be used for erosion control and filling of potholes during road maintenance.

- The **Axion TuffCrete** Road Building System can be built directly on top of the stabilized dirt. This provides for better quality roads, built in less time saving over 40% over conventional road's building costs and last longer.
- The roads can be built directly on the natural soil.
- Axion TuffCrete** highways are seamless without expansion joints .
- Parking lots were built directly on the natural soil in front of the Great Pyramid of Khufu in Giza, Egypt
- This **Axion TuffCrete** road was a part of a major project for UNESCO in the Great Pyramids area (one of Seven Wonders of the World in Giza, Egypt).
- Road partitions (road dividers) are seamless without expansion joints.
- Railroad partitions are seamless without expansions joints.
- Water drainage systems are seamless without expansion joints.
- Axion TuffCrete** road can carry a minimum load capacity of 600 metric tons per square meter. This exceeds all load bearing requirements.
- Axion TuffCrete** are safer to drive on at nights because they reflect the vehicle of lights.
- Axion TuffCrete** roads are easy to build. The new road section adheres to the old.
- If you need to lay a water pipe or any utility across a road simply cut the required area or utility with a concrete saw. Place the pipe or utility filling the void with **Axion TuffCrete**. The same **Axion TuffCrete** as originally used. Note, if this was a conventional asphalt road It would result in a permanent road deformation and failure.

FEATURES OF AXION TUFFCRETE

- Waterproof & Fireproof:** The only concrete type product in the world that is 100% waterproof and can withstand over 3500°C.
- Axion Tuffcrete Roads:** Seamless roads without expansion joints built directly on the stabilized natural soil. More load bearing capacity with the ability to carry up to 4000 metric tons per square meter
- Flexibility:** The only concrete type product in the world that has MORE FLEXIBILITY than steel reinforced concrete
- No Expansion Joints:** The only concrete type product whose expansion and contraction is almost zero%. Therefore, rigid pavements and roads can be build without expansion joints.
- More Load Bearing Capacity:** Waterproof, seamless TuffCrete that has a load bearing capacity of up to 4000 tons per sq. meter. Axion TuffCrete is the only product that is both

