

# Tekflex (Screen Replacement)

## Flexible, high strength, membrane strata support



### USES

Tekflex coating is a high tensile strength sealant specially designed to permanently stabilize the integrity of rock structures accommodating the stresses associated with strata movement while providing a barrier to moisture degradation.

### ADVANTAGES

- **Tough** - Ability to stretch, excellent tensile characteristics and fibre reinforcing assure coating integrity even after strata deformation.
- **Simple Mixing** - Convenient mixing of 2.5 :1 liquid to powder components minimizes mixing errors. No water or additional additives required.
- **Excellent Adhesion** - Special formulation enables superb adhesion to the rock assuring long life.
- **Non-Flammable** - No unusual storage or ventilation requirements, equipment clean-up procedures or waste disposal.

### DESCRIPTION

Tekflex coating is a cement based spray material designed with superb flexibility, high tensile strength and excellent adhesive qualities. The product enhances the structural integrity of the rock and forms an impervious barrier to negate the effects of weathering. Material coverage at a thickness of 1/16" to 1/8" (2mm to 3mm) varies from 1.2 to 2.7 ft<sup>2</sup> per litre, depending on the roughness of the rock surface.

### PACKAGING

Tekflex liquid - 5 gallon pails, 36 pails per pallet  
 Tekflex powder - 44 lb bags, 43 bags per pallet

A standard batch size is 5 pails liquid and 2 bags of powder which yields 117 litre of product.

### INSTRUCTIONS FOR USE

No unusual ventilation requirements are needed during application. Workers should take general precautions including protective clothing, gloves, dust masks and adequate eye protection.

1. Remove as much dust and loose material as possible. Spraying onto a dry, dust free substrate enables best results.
2. The best time to spray is right after excavation, when fresh, solid rock is first exposed.
3. Temperature should be 40 °F or higher. Ideal temperature is approximately 60 °F.
4. The practical thickness achieved will depend on the rock surface. Suggested thickness is 1/16" to 1/8" (2mm to 3mm). The material should not be applied thick enough to sag or slump as this can affect the bonding strength. Should this occur, allow the material to set before reapplication.
5. Pot life is approximately 30 minutes. Water may be used for clean up during this time.
6. Thoroughly purge all Tekflex material from the machine and lines with water when preparing for clean-up.

### SHELF LIFE

Both components have a shelf life of 6 months when stored in cool dry conditions. The liquid component must be kept above the freezing point.

### COMPARISON OF TEKFLX, SHOTCRETE AND MESH:

	100mm Shotcrete/Fiber	4mm Tekflex	9 ga. Welded Wire Mesh
Tensile Strength	<0.25 MPa	1.0 to 2.65 MPa	0.3 MPa
Adhesive Strength	0.70 MPa	0.16 to 0.65 MPa	n/a
Adhesive Capacity	2.1 kN/m <sup>3</sup>	3.25 kN/m <sup>3</sup>	est. 0.32 kN/m <sup>3</sup>
Load Bearing Capacity	30 tons	57 tons	1.4 tons
90% Cure Time	28 days	4 hrs	n/a

*Based on testing and evaluation conducted at Inco's Manitoba Division*