

# **Technical Data Sheet**



## **Description**

**Tek-Screed 50 C** is a polymer modified pre-bagged fiber reinforced single component to produce a consistent quality floor screed. The material has been specially formulated using washed graded sands, polymers, fibers and superplasticers to provide a smooth crack-free leveled surface.

## **Advantages**

- Single component
- Low shrinkage
- Low permeability
- Provides flat surface
- Crack free
- Easy application
- Can be over coated

#### Uses

- Refurbishing old concrete floors
- To repair old worn-out concrete industrial & residential floors
- To level undulated concrete floors

## **Physical Properties\***

Property	Typical Results
Compressive strength	>50 MPa at 28 days
Flexural strength	>8 MPa at 28 days
Tensile strength	>3MPa at 28 days
*The above properties are average laboratory values	

### **VOC Content**

Nil

#### Fire performance

BS 476 Part 7: Class 1 surface spread of flame

#### **Packing**

**Tek-Screed 50 C** is available in 25 and 50 kg bags.

#### **Yield**

Approximately 13.5 lt. per 25 kg bag. Maximum water mixing ratio – 3.5 lt. per 25 kg bag.

#### **Shelf Life**

12 months when stored in factory packed unopened bags in a cool dry and elevated place away from direct sunlight excess humidity and at a temperature not more than 35°C.

## **Application Guidelines**

Spraytek provides detailed method statements on all its products for use in various areas of applications. These must be referred to prior to carry-out the works. The information below is intended for guidance only.

## **Surface Preparation**

#### **Bonded screed**

Concrete substrate must be structurally sound. Loose or unsound concrete should be removed. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The substrate must be prepared to create a 'key' for bonding using light scrabbling or mechanical shot blasting or diamond grinding. Make sure to remove debris and dust using vacuum cleaning.

#### **Un-bonded screed**

The substrate should be clean, sound, dust free and without any trace of oil or grease. All loosely laid polystyrene boards and materials must be removed back and fix back to have a sound substrate. Separation layer of polythene sheet (1000 gauge) should be laid on polystyrene board prior to screed application.

## **Priming**

#### **Bonded screed**

Prime the concrete substrates using **Tek-Prime AR** applied at 8 to 10 m2 per lt. The primed surface must be tacky prior to applying **Tek-Screed 50 C**.

#### **Un-bonded screed**

Primer is not essential on separation layer of polythene sheet.

#### **Mixing**

**Tek-Screed 50 C** is single component consisting of powder, mix one 25 kg bag into 2.8 to 3.5 liters of clean water using RMX or drum screed mixer. Mix approximately for 3 minutes to achieve lump-free consistency. Do not add additional water. Do not mix by hand.

## **Application**

#### **Bonded screed**

The mixed material should be applied immediately after mixing is completed. Ensure the concrete floors is clean and damp. The application thickness should be between 10 mm to 80 mm. The screed thickness above 50mm should be compacted in multiple layers.

**Tek-Screed 50 C** may be spread with steel trowel or wooden float to required thickness and to achieve smooth leveled surface.

In applying to large floor areas using checker board or strip technique in areas not larger than 2m x 2m bays. When applying the screed in strips cut joint every 2m to at least half the depth of the screed within 24 hours of laying the screed. Do not add additional water or re temper the mix. Do not use water to finish the surface. Do not overwork; this would result in formation of weak layer of laitance which will affect the bonding of subsequent finishes.

The minimum cover over pipes and conduits should be 20mm and a layer of 19g or greater galvanized mesh should extend 75mm on each side of the pipe or conduits with an overlap of 75mm.

#### **Un-bonded screed**

The mixed **Tek-Screed 50 C** should be placed on to the separation layer of polythene sheet laid on concrete substrate or on polythene sheet laid polystyrene board substrate.

Pour the mixed product over the prepared area, the minimum application thickness should be 50mm in a single layer with thorough compaction.

Finish as required using appropriate tools.

## Curing

It is essential that floor screeds are cured correctly to ensure controlled water loss and to prevent de-bonding and random cracking. In hot windy conditions, mist spray with water and apply **Tek-Cure WB** immediately after finishing. As soon as it hardened mist spray with water and cover with polyethylene sheet taking care to ensure it is fully sealed at all edges. If this cannot be done use wet Hessian or sand beneath the polythene sheet and keep continuously wet for a minimum of 7 days.

#### **Precautions**

Ensure the temperature range for use 5°C to 45°C. Do not apply in rain or windy conditions or at temperature below 5°C.

Do not apply in direct sun light and drying wind. Do not mix by hand or use excess water

Do not add water to the stifled product

## **Technical Support**

Spraytek offers full technical support package to specifiers, contractors and end users, as well as technical support on site and after sales consultations.

## **Health & Safety**

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn. See packaging/MSDS for specific instructions.

Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

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