

# SILOS or tuffbed 2-pack



## A better alternative to silos?

Despite popular belief, silos offer little benefit to successful pavement construction. In fact, not only are they at the heart of issues with mortar mix quality control, their use leads to quality issues in the pavement construction and a high incidence of post-construction problems. Silos are now also known to increase the carbon impact of a project.



These are the findings of a lengthy study carried out by tuffbau's engineers on the use of silos, across a number of sites and projects.

Prior to the study, tuffbau, like its competitors, also offered its mortars in silos, but with mounting evidence that they were contributing to onsite materials and workmanship issues tuffbau took the decision to withdraw the silo option. Determined to provide a superior alternative and help installers overcome quality and workmanship, tuffbau developed 'tuffbed 2-Pack'.

Twenty years later and the high-performance characteristics of tuffbed 2-Pack are recognised across the industry.



And now, with an increasing need to drive down carbon emissions, specifiers and contractors can take advantage of tuffbed 2-Pack's inherent 'low carbon' characteristics.



The high performance and low carbon characteristics of tuffbed 2-Pack can make a vital contribution to the success of any project. These are performance and environmental benefits that simply can't be matched by traditional bedding mortars produced from silos.

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**tuffbau**<sup>®</sup>  
high performance  
paving mortars

## Silos



- ✓ Convenient easy delivery for the manufacturer / supplier
- ✓ Visually prominent, easily seen, provides good advertising opportunities for manufacturer and contractor
- 👣 Dedicated water supply required
- 👣 Dedicated power supply required
- 👣 Onerous daily mechanical condition checklist and cleaning routine required
- 👣 Regular and essential calibration checks required
- 👣 All mortar ingredients must be dried and kept dry. Production of fully dried mortar ingredients for use in silos uses huge amounts of carbon emitting energy during drying
- 👣 Settling out of aggregate in silo can cause mix ratio problems and poor-quality mix, adversely affecting work quality
- 👣 Silo has a fixed site location. This affects work quality—when the silo is too far from the laying area and starts to harden during transport across site
- 👣 Promotes waste – silos encourage mixing of oversized batches that harden quicker than the laying team can use
- 👣 Silos put pressure on work quality increasing risk of early failure of the pavement, repair/ replacement of which increases carbon impact.

**None of the above are advantageous to the contractor or the project**

## tuffbed 2-pack



- ✓ No dedicated water supply required
- ✓ No dedicated power supply required
- ✓ No onerous daily mechanical condition checklist and cleaning routine required
- ✓ No regular and essential calibration checks required
- 👣 Only the binder ingredient is dry manufactured. Aggregate, 80% of tuffbed 2-Pack, is undried, hugely reducing the amount of carbon emitted in its production and storage
- 👣 Mix ratio quality is easily maintained with precisely pre-measured and packaged aggregate and binder, thereby preserving work quality
- 👣 tuffbed 2-Pack is mixed at the 'workface' ensuring the laying team is consistently supplied with fresh, accurately mixed mortar. This supports consistent and high quality workmanship
- 👣 Promotes zero waste – premeasured ingredients produce batch sizes to match the work rate of most laying teams – entire batch used
- 👣 tuffbed 2-Pack improves work quality, construction quality, reducing risk of early failure and damaging carbon impact of chronic repair or replacement
- 👣 All tuffbed 2-Pack packaging is 100% recyclable and can be greatly reduced further than the aggregate is delivered in 850kg bulk bags. (Care needed to ensure accuracy of mix ratio is maintained.)

**All of the above are of advantage to the contractor or the project**