

# **Technical Data Sheet**



## tuffbed 2-pack Type 35, Permeable, Low Carbon Bedding Mortar for paving

To understand tuffbed 2-pack it is useful to know how it is packaged, ordered and handled. tuffbed 2-pack is a two-part product comprising; a dry powder binder in 25 kg bags and a 2-6 mm crushed igneous rock aggregate in separate 25 kg bags (tuffgrit). When ordering; specify 1no bag of binder to every 4no. bags of aggregate. The bags of binder and aggregate arrive on site on separate pallets (see below: 'Important - Ordering'). tuffbed 2-pack binder is mixed with the aggregate on site at the ratio of 1:4.

#### **Product Summary**

A high performance Type 35 bedding mortar to BS 7533-101:2021 Table 9, for modular pavement construction. tuffbed 2-pack is free draining as required by BS 7533 and also has a low carbon manufacturing profile.

#### **Product Applications**

For use in all traffic categories described in BS 7533-101 Table 2b. tuffbed 2-pack is uniquely designed and formulated as a bedding mortar for modular pavements constructed in natural stone setts and slabs, concrete blocks and flags, porcelain and clay pavers.

BS 7533-101:2021 recommends a laying course (bedding) thickness of 40mm. Greater depths can be achieved by adding multiple layers of up to 70mm per layer.

#### **Product Description**

tuffbed 2-pack is a high-performance hydraulic Type 35 bedding mortar. It is formulated to provide the correct supporting stiffness while continuously absorbing thermal and dynamic stresses inherent in all pavement structures.

tuffbed 2-pack complies with all 'bedding mortar characteristics' stated in BS 7533-101 including the requirement for a maximum 20mm capillary rise when tested in accordance with Annex C in the standard.

*On-site:* Binder and aggregate are mixed to the ratio of 1:4 (1no. bag of binder to 4no. bags of aggregate) with typically 7 litres of water required for every 125 kg mix. Where enhanced adhesion is required (as clause 5.4.2 of BS 7533-101) use tuffbond priming mortar in conjunction with tuffbed 2-pack. Also see the tuffbond product data sheet.

#### **Important - Ordering**

Ordering: When ordering, binder and aggregate need to be itemised separately on the order in the ratio of 1x 25 kg bag of tuffbed 2-pack binder to 4x 25 kg bags of tuffgrit aggregate. Binder and aggregate are delivered to site on separate pallets. Steintec's sales team are always available to assist with working out the correct quantities of binder and aggregate material for each order.

#### **Storage Life**

**Storage life:** tuffbed 2-pack; dry powder binder: two years from manufacture date when stored in dry conditions





### **Technical Specification**

Hango	Bedding / Laying Course
Usage	Two part product;
Characteristics	binder and tuffgrit aggregate
Colour	Grey
Packaging	25 kg Bag
Bed depth	≥ 20 mm (BS7533:101; 40 mm recommended)
Typical water used	7 litres per 125 kg batch
Typical consumption / coverage	30 mm: 60 kg/m <sup>2</sup> 40 mm: 80 kg/m <sup>2</sup> 50 mm: 100 kg/m <sup>2</sup>
Packages per pallet - Binder	40
Packages per pallet - Aggregate	40
Pallet weight	1,030 kg inc. pallet
Working time	40 min at 10°C 30 min at 20°C
Working temperature	≥ 2°C
Compressive strength (20°C)	14 days: ≥ 25 MPa 28 days: ≥ 35 MPa
Flexural strength	≥ 7 MPa
Adhesion stength	≥ 2 MPa (with tuffbond)
Vertical permeability	> 5.5 x 10 <sup>-4</sup> m/s
Capillary rise	< 20 mm
Modulus of elasticity	(18,000 ± 3,500) MPa
Shrinkage	≤ 0.09%
Storage life	2 years from manufacture date
NBS sections	M10, Q24, Q25
Compliance	BS 7533-101:2021
Uniclass 2015	Pr 20 31 53 61 Paving Laying Course Mortars

*Warranty:* We warrant that 'tuffbed 2-pack' is produced to the stated performance standards. On-site testing is recommended to ensure external factors do not compromise product performance.



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