GTF Freese
Marine Floorings

Product Data Sheet

TEFROTEX® 500 P

Extremely light-weight ship insulation floor as subfloor and leveling compound for carpet in cabin areas and other low stress areas. For other areas or other floor coverings please contact us.

1. Field of Application

TEFROTEX® 500 P is an extremely light weight cement based system for installation of primary deck coverings on inside ship decks. The product fulfills the requirements according to IMO FTP Code 2010 for primary deck coverings.
The product characterizes by its high thermal insulation.TEFROTEX® 500 P is supplied as premixed powder in bags and is mixed with water and light filler Poraver 1-2 mm on the job, application by hand.

2. Properties

• High thermal insulation	• Easy application	• High thermal insulation
• Fast curing	• Jointless	• Excellent adhesion
• Two-component	• Soft plastic mortar	• Self-levelling

3. Technical Data

Packing size	TEFROTEX® 500 dry mortar	bag	14	kg
Water demand		per bag	5.90	l
Added quantity Poraver 1-2 mm		per bag	12	l
Application temperature			5 - 30	°C
Application thickness			10 - 50	mm
Working time		+ 20 °C	> 30	minutes
Compressive strength	28 days	EN 13813	> 10	N/mm²
Flexural strength	28 days	EN 13813	> 3.5	N/mm²
Density cured mortar		EN 1015-15	approx 0.6	kg/dm³
Specific thermal conductivity		EN 6946	0.17	W/(m*k)
Fire rating	IMO FTP Code 2010		Part 5	

4. Packing

14 kg - bag TEFROTEX® 500
12.5 kg - bag Poraver 1 - 2 mm conforms to approx. 54 liters

5. Substructure

Requirements

- The substructure has to be dry, clean and free from grease and oil.
- Temperature of substructure should be higher than + 5°C.
- Condition of substructure always needs to be checked before application of TEFROTEX® 500 P.

Substructures

a) Steel-decks

- Steel-decks have to be prepared by the shipyard and treated with a suitable shop primer.
- If not, please contact us.
- The surface needs to be pre-treated with TEFRO®bond W1 before application of TEFROTEX® 500 P.

b) Aluminum decks and galvanized steel-decks
- These surfaces need to be clean, grinded and treated with TEFROTEX® SF Primer or other suitable primer systems as well as TEFRO®bond W1.

c) Cement-based substructures
- Cement-based substructures need to be pre-treated with TEFRO®bond W1 to serve as bonding agent.

d) Other substrates
- Please contact us.

6. Application Information

Mixing

Slurry coat made of TEFROTEX® 90-L:
- Pour 7.3 liters of water into a compulsory mixer or mixing pail.
- Add one bag of TEFROTEX® 90-L premixed powder.
- Stir up both components thoroughly.
- Mix until a homogenous and lump-free mixture is reached.

Main coat
- Pour 11.8 liters of water into a compulsory mixer or mixing pail.
- Add two bags of TEFROTEX® 500 premixed powder.
- Stir up both components thoroughly.
- Add approx. 24 liters of light-filler PORAVER 1 - 2 mm.
- Mix all components for approx. 1 - 2 minutes.
- A homogeneous, lumpfree compound should result.

Application

Slurry coat
- Pour out the homogenous, lump-free mixture.
- For application use e.g. a levelling trowel.
- Thickness (technical): approx. 2 mm.

Main coat
- Pour out the homogenous, lump-free mixture on the still wet slurry coat.
- For application use e.g. a levelling trowel.
- Rub the mixture with a float and smooth it with a smoothing trowel.
- High temperatures shorten and low temperatures extend the working time.
- After application protect the area from direct sunlight, heat and draft for at least 24 hours.
- TEFROTEX® 500 P will be ready for foot traffic after approx. 6 hours at an average temperature of +20°C, fully cured,after approx. 7 days.
- Subsequent floor coverings should be applied only after TEFROTEX® 500 P has dried out completely.

- Before application of subsequnet floor coverings TEFROTEX® 500 P is pretreated with TEFROTEX® SF Subcoat.
- Residual moisture to be observed (for light mortar systems approx. 4 % as per CM method).
- Please contact us for any other approach of application.

Efficiency

- One bag of dry mortar 14 kg + 5.9 liters of water + 12 liters of Poraver 1 - 2 mm water result in 30 liters.
- 30 liters cover approx. 3 m² at 10 mm thickness.
- Consumption mortar abt. 0.46 kg/m²/mm.

Equipment and Cleaning

- Mixing tool, levelling trowel, smoothing trowel, float
- Rinse out tools and equipment with water right after use.

7. System Products

TEFROTEX® SF Primer, TEFRO®bond W1, TEFROTEX® 90-L, Light-filler PORAVER 1 - 2 mm.

8. Shelf Life

12 months, in a cool, dry, frost-free place in closed original bags at 10 - 30 °C. In case of discrepancies please contact us.

9. General Remarks

All mentioned figures and consumption values are results which were determined under laboratory conditions. When using the product on the job, deviating values may result. Lower temperatures delay; higher temperatures accelerate hardening and curing of the product. The specified minimum application temperatures have to be followed. No other materials may be added and the mixing ratios are not allowed to be changed.

10. Conformity

The product meets the criteria of IMO FTP-Code 2010, attachment 1, Part 5. MED Certification and type approvals of other classification societies are available. The conformity is in accordance with the effective regulations 2014/90/EU of 23-July-2014. For the wheel symbol the general principles of article 30, paragraph 1, 3 and 6 of the regulation (EG) no. 765/2008 apply.

11. Safety

This mineral product is cement based and poor in chromate. Read the hazard notes and safety advices as stated in the safety data sheets and general rules.

12. General Note

This product data sheet is based on the latest state of art and our experience and it is giving recommendations based on our best knowledge. However, it is without legal binding and establishes neither a contractual legal relationship, nor a secondary obligation on any sales contract. This product data sheet does not release the buyer or user of the obligation, to check the substructure and the material for the intended purpose. If the buyer or user is going to use the material differently than described above, it needs to be discussed with manufacturer before application. Without approval of altered use of material, usage is at the buyers or users risk. This refers especially to combinations with other products. Only product data sheets of latest date are valid.