Weber Marine Floors

High Performance Flooring Systems

Weber leads the world in the production of pumpable self-levelling floor screeds. With 30 years of experience and more than 100 million square metres applied worldwide, the Weber flooring range gives you high performance floors, for any application, quickly and cost-effectively.

Weber is more than just a range of superlative floor screeds, it is a variety of superbly engineered flooring systems that build, layer by layer into the optimum solution to meet each individual flooring requirement. All weber.floor screeds are manufactured in plants working to the most stringent ISO 9001 quality standards and to ISO 14001 Environmental Management Systems.

Self-levelling, self-smoothing

They allow you to achieve the flattest, smoothest and thinnest floors possible, that will perform to exact standards, often in highly testing environments. And they will minimise installation and drying time to prevent disruption.

weber.floor delivers high quality, quick curing solutions

With the advent of pumped, self-levelling floor screeds, the world of commercial and industrial flooring was changed permanently. Weber was in the vanguard of this revolution, creating products that have brought the flooring industry up from its knees, offering the ability to create superb, high-performance seamless floors at speeds that were previously unachievable and with a quality and longevity that have become renowned throughout Europe.

Logistics, application

weber.floor products are premixed at the manufacturing plant and provide a host of features and benefits.

- factory blending ensures quality of product every time.
- machine mixing guarantees optimum consistency.
- delivered in bags, bulk or pump trucks.
- pumpable, minimising down time and enhancing ergonomics.
- rapid installation, fast curing.
- rapid setting times mean floors are walkable after 1-3 hours.
- high strength, low thickness characteristics minimise loss of floor-to-ceiling height.
- self compacting.
- self levelling and ready to receive surface finish after 1-3 days.
- up to 300 m^2 per hour can be covered.
- applied by Accredited Weber Marine Contractors.

Certification and approvals

The Weber range of marine products satisfies the requirements stipulated by the authorities and the leading classification societies. All the Weber marine self-levelling screeds are design approved by Det Norske Veritas (DNV)

- **MED-B certificates:** DNV, US Coast Guard
- **Certificates also available:** ABS, NK, RMRS, TC, LR, Russian River Register, Achilles JQS
- **Fire resistance:** SINTEF Fire laboratory, Norway.
- **Sound properties:** Lloyd´s Register ODS, Denmark.

Weber Marine Floor Products

The Weber range of products are pumpable, reducing the time needed for screeding, thus ensuring installation of primary deck covering up to 300m^2/hr that is walkable after one to three hours. Floor covering can be laid after just one to three days. Weber supplies functional and durable floors specified for ships requiring primary deck coverings, and more.

weber.floor 4660 Marine Elastic

weber.Floor 4660 Marine Elastic is a cement based pumpable, fibre reinforced levelling material for primarily steel, galvanized steel and aluminium decks. Floor 4660 is designed to be used in marine applications in light traffic areas and finished with a floor covering such as PVC, vinyl, linoleum, ceramic tiles, carpets etc. It can be used as either a bonding or floating screed and as an underlayment screed for use on steel, galvanized steel or aluminium. It can also be applied on existing concrete substrates for ship repair purposes.

weber.floor 4680 Marine Light

weber.floor 4680 Marine Light is a lightweight polymer modified cement based fine smoothing compound for use as a levelling material on steel, galvanized steel and aluminium decks. Floor 4680 is designed to be used in marine applications in light traffic areas and finished with a floor covering such as PVC, vinyl, linoleum, ceramic tiles, carpets etc. It is used as a bonding screed and as an underlayment screed for use on steel, galvanized steel or aluminium decks.

weber.floor 4716 Primer

weber.floor 4716 Primer is a styrene acrylate dispersion which is diluted with clean water and Weber's screed products. Floor 4716 is designed for priming (pre-treating) substrates prior to application of Weber Marine Floor Products.

weber.floor 4665 Marine Fire

weber.floor 4665 Marine Fire is a cement based, pumpable levelling material for installations requiring fire insulating constructions with non-combustible materials according to IMO Res. A.754(18). Floor 4665 is designed to be used for application on mineral wool in A-60 approved flooring systems.

weber.floor 4670 Marine Base

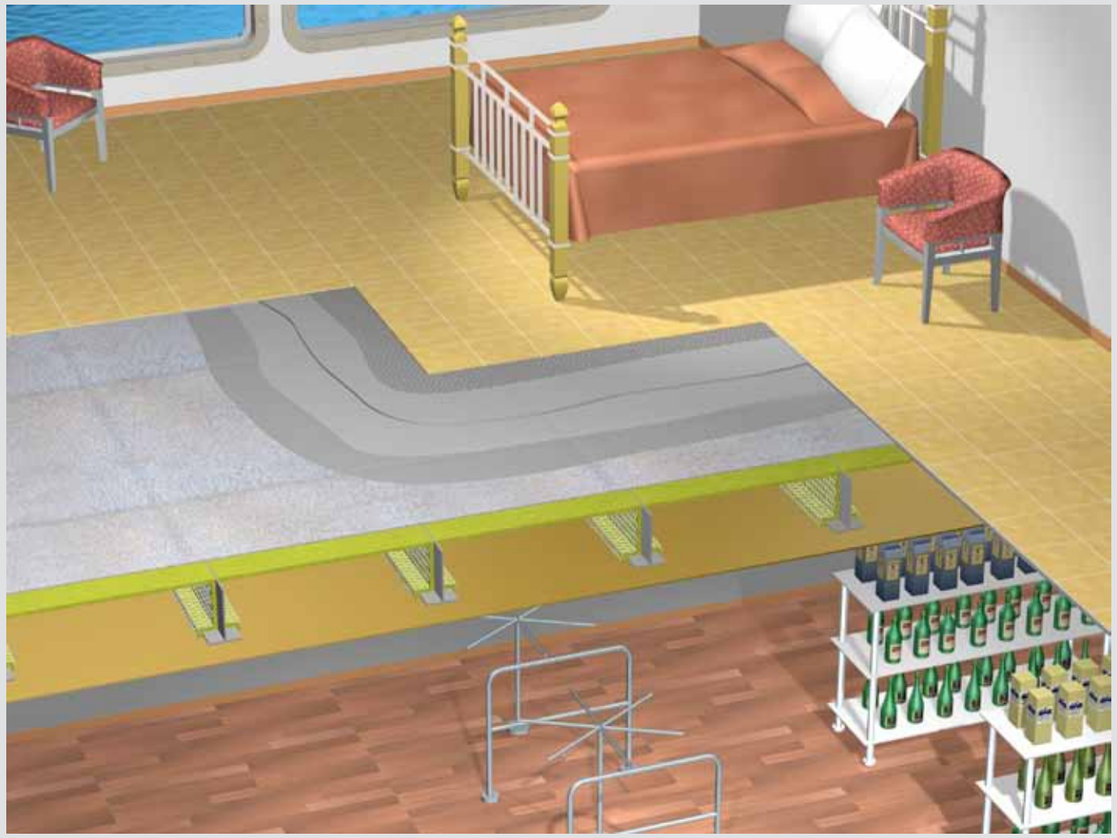
weber.floor 4670 Marine Base is a rapid drying mortar for use on steel, galvanized steel and aluminium decks, concrete and ceramic tiles. Floor 4670 is designed for use in living quarters, wet rooms and other light traffic areas with special requirements for quick surface strength for early application of a floor covering.

weber.floor 4710N Epoxy Primer

weber.floor 4710N Epoxy Primer is a two component, solvent free primer for use with Weber's screed products. Floor 4710N is designed for priming (pre-treating) of aluminium and galvanized steel substrates prior to application of Weber Marine Floor Products.

Weber Marine Primary Deck Covering

Weber Marine Primary Deck Covering features flexible, durable pumped screed systems for steel decking with a low constructional height. The fresh surface can be smoothed gently with a spatula to give a perfectly smooth surface.



Composed of the following:

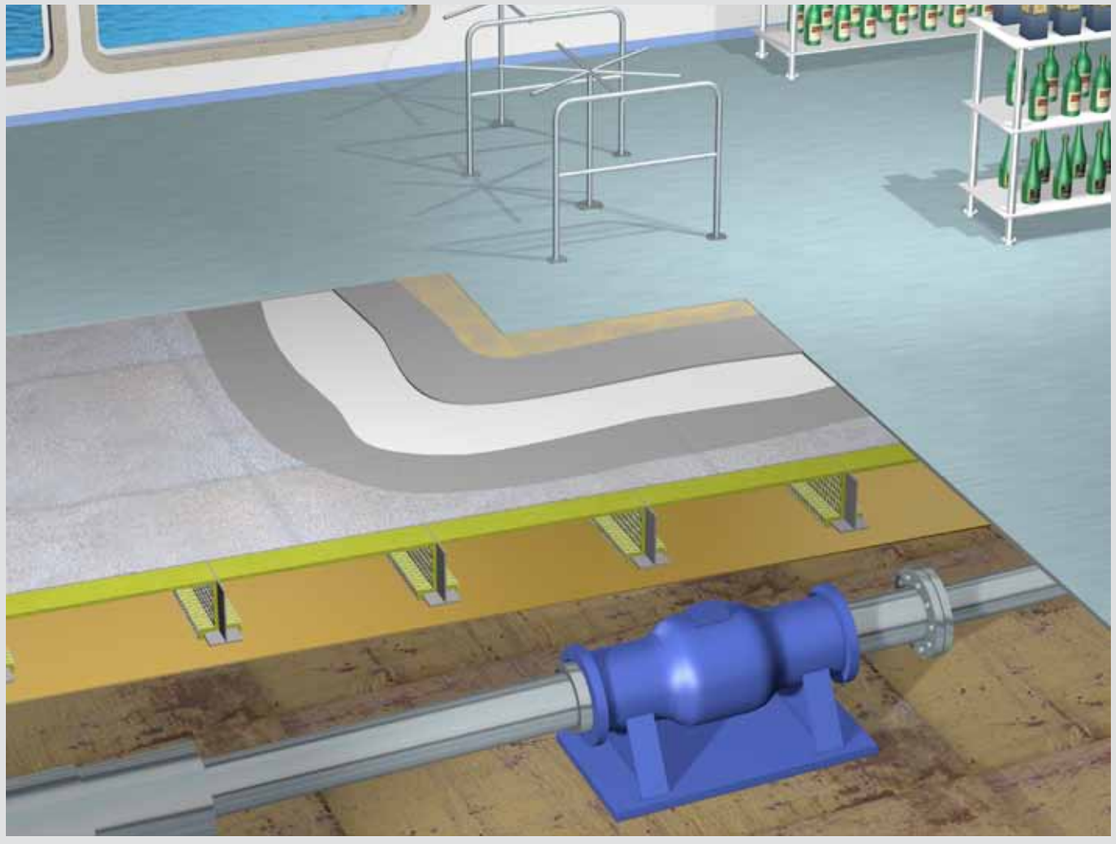
1. layer: weber.floor 4716 Primer (Marine Based)

2. layer: Weber Marine Deck Covering (cement based levelling compound)
   – weber.floor 4660 Marine Elastic
   – weber.floor 4670 Marine Base
   – weber.floor 4680 Marine Light

Floors for marine applications are subject to extreme stresses, such as knocks, vibrations and tremors, torsions and shrinkage where failure to adhere are common industry problems. By installing a Weber Marine Floor you avoid these challenges. The decisive benefits of the Weber range of marine solutions are the efficient properties of the solutions – speed of application and access.

Weber Marine Light dB Floor

Weber Marine Light dB Floor is a flexible, durable pumped screed system for steel decks, with low constructional height and structure borne sound insulation.



Composed of the following:

1. layer: 1,5 mm Visco-elastic layer
(ACM, DG U-1 or DG U-1 Green from Swedac)

2. layer: 15 mm weber.floor 4660 Marine Elastic
(cement based, fibre-reinforced levelling compound with nominal density of 1,7 kg/m²/mm)

Weber Marine A-60 Floor

Weber Marine A-60 Floor is DNV A-60 approved and designed for ships and oil platforms requiring fire insulating constructions where the material must be non-combustible according to IMO rules. Weber supplies functional and durable floors specified for ships requiring fire insulating constructions with non-combustible materials.

Composed of the following:

1. layer: 50 mm non-combustible mineral wool
(according to certificate)

2. layer: Interglass woven glass fabric with weight 100-300 g/m², or equivalent non-combustible product

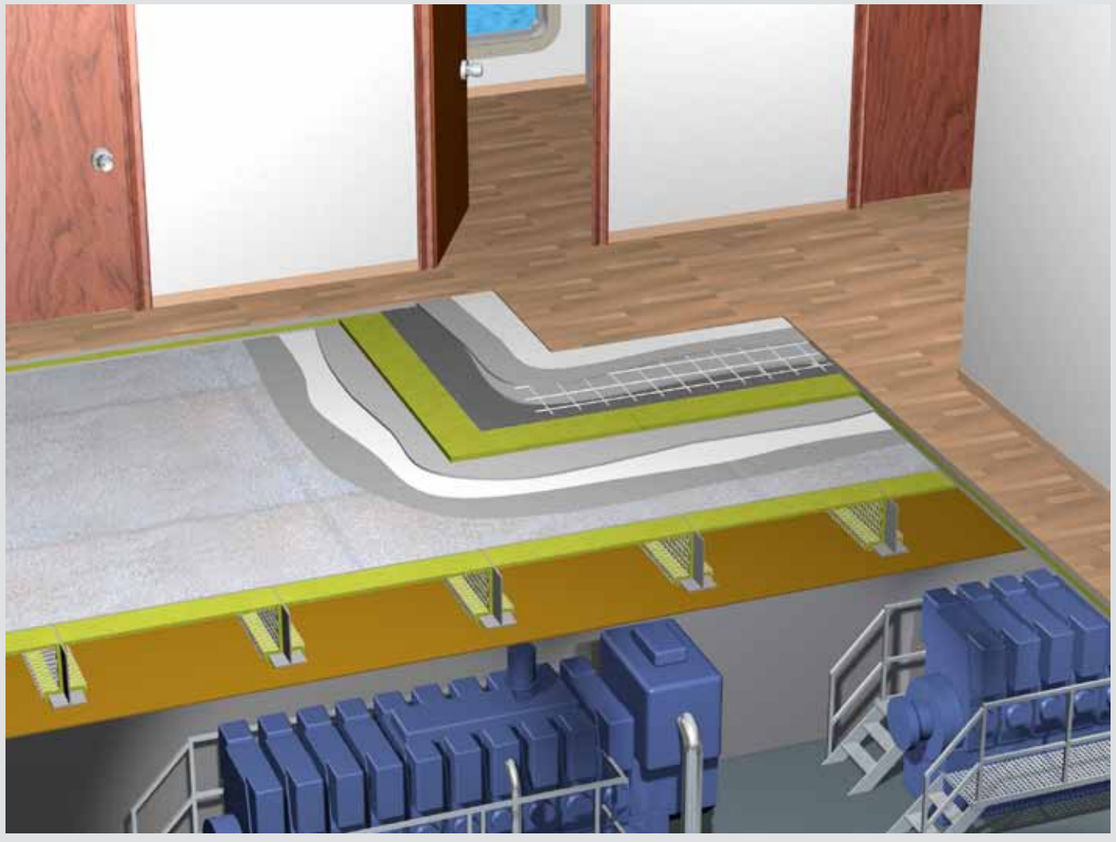
3. layer: Steel reinforcement net Ø 5mm, grid 150 x 150mm

4. layer: 25mm weber.floor 4665 Marine Fire
(cement based levelling compound with nominal density of 1,7 kg/m²/mm)

Floors for marine applications are subject to extreme stresses, such as knocks, vibrations and tremors, torsions and shrinkage where failure to adhere are common industry problems. By installing a Weber Marine Floor you avoid these challenges. The decisive benefits of the Weber range of marine solutions are the efficient properties of the solutions – speed of application and access.

Weber Marine dB Floor

Weber Marine dB Floor is designed for ships and offshore installations requiring sound-insulation, effective against airborne, impact and structure-borne sound. Weber supplies functional and durable floors specified for ships requiring sound insulating constructions.



Composed of the following:

1. layer: 1,5 mm Visco-elastic layer (ACM, DG U-1 or DG U-1 Green from Swedac)
2. layer: 15 mm weber.floor 4660 Marine Elastic (cement based, fibre reinforced levelling compound with nominal density of 1,7 kg/m²/mm)
3. layer: 50 mm non-combustible mineral wool (according to certificate)
4. layer: 1,2 mm geo textile, GeoPro SI 401 from GeoTippTex, Hungary or equivalent with nominal density 135 g/m²
5. layer: Steel reinforcement net Ø 5mm, grid 150 x 150mm
6. layer: 25mm weber.floor 4665 Marine Fire (cement based levelling compound with nominal density of 1,7 kg/m²/mm)

Weber Marine dB A-60 Floor

Weber Marine dB A-60 Floor is designed for ships and offshore installations requiring fire-insulated constructions and sound-insulation. Weber supplies functional and durable floors specified for ships requiring fire insulating constructions with non-combustible materials and sound insulating constructions.

Composed of the following:

1. layer: 1,5 mm Visco-elastic layer (ACM or DG U-1 Green from Swedac)
2. layer: 15 mm weber.floor 4660 Marine Elastic (cement based, fibre reinforced levelling compound with nominal density of 1,7 kg/m²/mm)
3. layer: 50 mm non-combustible mineral wool (according to certificate)
4. layer: Interglass woven glass fabric with weight 100-300 g/m², or equivalent non-combustible product
5. layer: Steel reinforcement net Ø 5 mm, grid 150 x 150 mm
6. layer: 25 mm weber.floor 4665 Marine Fire (cement based levelling compound with nominal density of 1,7 kg/m²/mm)

i Floors for marine applications are subject to extreme stresses, such as knocks, vibrations and tremors, torsions and shrinkage where failure to adhere are common industry problems. By installing a Weber Marine Floor you avoid these challenges. The decisive benefits of the Weber range of marine solutions are the efficient properties of the solutions – speed of application and access.

Weber Marine Waterproofing

Weber Marine Waterproofing products are designed to protect various parts of the construction from water and to overcome issues caused by moisture. These modern solutions are flexible in use and therefore ideal for ships and offshore installations requiring waterproofing. For marine- and offshore applications, Weber has developed a complete wet area system that is DNV approved.

weber.tec 822 System – consist of:

1. layer: weber.prim 801 Primer:
2. layer: weber.tec 822 Membrane:
3. layer: weber.set 858 Tile Adhesive:
4. layer: weber.color 877 Grout Mortar:

weber.xerm 847 System – consist of:

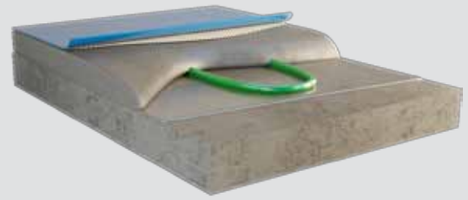
1. layer: weber.prim 801 Primer:
2. layer: weber.xerm 847 Epoxy Membrane:
3. layer: weber.color 877 Grout Mortar:

Weber Marine Thermofloor

Weber Marine Thermofloor is designed for improved comfort in living quarters.
Weber has, together with cooperation partner Ogland System, long and proven experience in supply of low profile heating floor. The floor is easy installed on all types of marine accommodations as well as for refits/refurbishments.
The range of heating products are designed to solve problems with snow and ice, humidity, condensation and freezing. The products satisfy the Regulations for Electrical Installations in Norway and Scandinavia, which are among the world´s strictest.

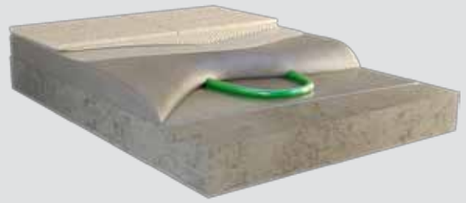
Under vinyl strip floor, directly on steel plate

If using welded vinyl strip the membrane can be omitted, as the covering is vapour-proof. To avoid heat stains on vinyl and spread heat more evenly, we recommend min. 15 mm cover over cable. Alternatively, use 8W/m cable if a thinner floor is required (min. 10 mm cover over cable).



Under vinyl strip floor

If using welded vinyl strip the membrane can be omitted, as the covering is vapour-proof. To avoid heat stains on vinyl and spread heat more evenly, We recommend min. 15 mm cover over cable. Alternatively, use 8W/m cable if a thinner floor is required (min. 10 mm cover over cable).



Under ceramic tile floor

If applying tiles on a wet area floor (bathroom, galley or similar) you are required to apply: a certified vapour-proof membrane to stop moisture penetration. Weber Marine Waterproofing have the required products in the portfolio. Apply the membrane on top of the solid screed, we recommend min. 5 mm cover over cable.

Floating on mineral wool insulated steel plate

The installation principles are the same, but the substrate need to be sealed due to the self levelling screed being applied. The heating cable is fixed (using plastic strips) to the reinforcement net, Ø 5 mm, grid 150 x 150 mm

Energy saving:

Floor heating gives even heat distribution, accordingly the room temperature can be lowered by 2°C as opposed to rooms with other heating sources.

Recommended application areas:

The floor heating system is certified for use in accommodation areas onboard ships and offshore installations. The screed can be used to subfloors for the most floor covers in layers up to 30 mm and is recommended to plane corrosion protected steel floors.

Advantages in use:

- Heating cables normally last the life-time of the installation
- Free of electromagnetic radiation
- Zero maintenance costs
- Automatic temperature regulation
- «Invisible» heat source, no conflict when furnishing
- No dust burning
- The weber.floor 4660 Marine Elastic is mixed in pure water and is pumpable

High competence and knowledge with our cooperation partners

Weber Marine Floor proposes a selection of products and solutions, which in collaboration with selected cooperation partners provides optimal results and solutions.

Quality Assured application by Accredited Weber Marine Floor Contractors

When proposing high quality products and solutions, it is always one subject which is very important in addition to the product itself – the installation. Weber Marine floors shall always be supplied in the exact quality as agreed and in terms of function, strength, durability, surface, flexibility and so on. This is the reason why our Marine Floor Products, Systems and Concepts are applied by Accredited Weber Marine Floor Contractors (AWMFC).

Weber teach and train our contractors to perform an excellent quality to the clients' satisfaction. The contractors are regularly re-certified by Weber to receive the latest information concerning developments of products and concepts. For the end-user this means quality assured installation of Weber Marine Floors that is performed according to the Weber installation instructions.

All stages in the Marine Flooring application are crucial for the final result. Therefore, we have introduced a quality assurance (QA) procedure to be followed by Weber and our Accredited Weber Marine Floor Contractors.

The control consists of:
- Quality Control of raw materials
- Production control - ISO 9001/14001
- Quality Control of finished product
- Product certificate
- AWMFC consignment control
- AWMFC Quality Control
- Quality Assurance of finished floor

Certified contractors by Weber are Accredited Weber Marine Floor Contractors (AWMFC) and perform all types of marine floor installations. Our contractors are:
- Experienced, skilled and educated
- Trained and approved by Weber
- Theoretical and practical training
- Independent local companies in close cooperation with Weber

Training can be performed either in Weber's own premises or at a feasible location selected by the contractor and can be arranged upon request. For new Weber Marine Floor Contractors Weber will, if requested, assist with technical support during the first installations of marine floors.

ACCREDITED weber SAINT-GOBAIN MARINE FLOOR CONTRACTOR

Weber Marine Light Weight Solutions

Our Weber Marine Light Weight Solutions will enable **lighter** and more efficient constructions, reduce **energy** consumption, increase the security and fire **safety** and improve the **comfort** – a sound investment for the future.

Light-weight high performance quality flooring

systems are easy to apply, while offering high levels of noise reduction in combination with our special light weight glass wool insulation. Materials that are lighter than traditional insulating materials, while still possessing the same fire-resistant, thermal and acoustic performances.

Some light weight solutions in Weber Marine Floor Portfolio...

weber.floor 4680 Marine Light:

Floor 4680 meets weight demand for passenger ferries, cruise vessels and offshore installations. Compared with general leveling you will have weight saving of: 45-50%

weber.floor 4660 Marine Elastic + LWA:

Weber is world leading manufacturer of Expanded Clay Aggregates (LWA) under the brand name Leca®. Combined with the high quality performance product Floor 4660 Marine Elastic the result is light weight leveling. Compared with mortar (leveling for thicker layers) you will have weight saving of: 60-65%

Weber Marine Floating Floors - with Isover ULTIMATE:

Weber recently launched Isover ULTIMATE as an alternative insulation in our Weber Marine Floating Floors:

- Weber Marine A-60 Floor
- Weber Marine dB Floor
- Weber Marine dB A-60 Floor

Isover ULTIMATE, the next generation mineral wool and new high performance insulation material, combines the advantages of conventional insulation used for fire, thermal and acoustic applications and at the same time allowing substantial weight savings. Weight saving, compared to general mineral wool with same performance: 2,5 kg/m2 (at least 35%)

Weber is the only company today(!) that have floating floor solutions with Isover ULTIMATE tested, certified and part of flooring system.

Saint-Gobain Marine Applications

Weber is a member of Saint-Gobain Marine Applications, created in 2004. Saint-Gobain Marine Applications has brought together no less than ten renowned specialists in developing and producing solutions and products in the field of glazing, insulation, flooring, interior finishing, climate control and more.

Right from the initial stages of a project, Saint-Gobain Marine Applications provides architects, designers, owners and administrative authorities with a choice of innovative products and services for the construction or renovation of ships and offshore constructions. Our products comply with the environmental, energy efficiency, weight saving, safety, aesthetic and comfort requirements for ships that are omnipresent in our customers' specifications

This new approach will enable lighter and more efficient ships to be constructed, reduce energy consumption, increase security and fire safety and improve the comfort of passengers and crew – with integrated solutions that will be a sound investment for the future.

SAINT-GOBAIN MARINE APPLICATIONS

Swedac noise control solutions

The SWEDAC Deck covering System is a method of noise control in ships, which acts by preventing vibration of the steel structure. The energy thus absorbed is therefore not available to be radiated as sound in the treated area or in other parts of the ship. Over 200.000 square meters of Swedac Deck covering systems have been installed over the past 15 years.
The viscoelastic layer forms the filling of a sandwich construction between the steel of the deck and a constraining layer of latex modified concrete or steel. As the deck flexes under vibration transmitted to it from engines or propellers, the viscoelastic layer is placed in shear. The special property of a viscoelastic material is that it not recover at the same rate as which it is distorted, and energy from the vibration is therefore absorbed, leaving less to be radiated as noise.

Weber has long and proven cooperation with Swedac and together we provide outstanding high quality solutions for sound reduction and less noise – improved comfort for passengers and crew.

swedac

Product guide

PRODUCT	FIELD OF APPLICATION	SUBSTRATE	PROPERTIES	CONSUMPTION
Weber.floor 4716 Primer	Pre-treatment of substrates prior to application of Weber Marine Floors	Steel, concrete, ceramics, stone, wooden substrates, PVC, linoleum	Improves adhesion, prevents air-bubbles and dewatering of screed before hardening.	Steel (5:1) 0,20 l/m^2 Concrete (1:3) 0,10 l/m^2 Wooden floors/linoleum (5:1) 0,20 l/m^2 4710N Epoxy Primer (5:1) 0,20 l/m^2 PVC (1:1) 0,15 l/m^2 Ceramics (1:1) + powder scattering 0,15 l/m^2
Weber.floor 4710N Epoxy Primer	System primer and binder for Weber Marine Floors on special substrates	Galvanised steel, aluminium	Two-component, solvent-free epoxy resin primer. Has very low viscosity and improves adhesion. Applied in one coat.	Galvanised steel 0,20-0,30 kg/m^2 + sand scattering Aluminium 0,20-0,30 kg/m^2+ sand scattering
Weber.floor 4660 Marine Elastic	Levelling of decks in light traffic areas for ships and offshore installations. For hand application or applied using Weber.floor mixing pump.	Steel, galvanised steel, aluminium, concrete, ceramics, stone, wooden substrates	Cement-based, fibre-reinforced, pumpable levelling material. It quickly attains a high surface strength. Layer thickness 2-30 mm, walkable after 1-3 hours and final covering after 1-3 days.	1,7 kg/m^2/mm
Weber.floor 4665 Marine Fire	Levelling of floating floor constructions in light traffic areas for ships and offshore installations. For hand application or applied using Weber.floor mixing pump.	Mineral wool	Cement-based, pumpable levelling material. It quickly attains a high surface strength. Layer thickness 2-30 mm, walkable after 6-12 hours and final covering after 1-3 days.	1,7 kg/m^2/mm
Weber.floor 4670 Marine Base	Levelling of decks in light traffic areas for ships and offshore installations. For hand application	Steel, galvanised steel, aluminium, concrete, ceramics	Rapid drying mortar for levelling and slope building in living quarters, wet areas and other light traffic areas. It quickly attains a high surface strength. Layer thickness 20-100 mm, walkable after 2-3 hours and final covering after 1 day.	1,8 kg/m^2/mm
Weber.floor 4675 MarineFlow Rapid	Refurbishment of old floor constructions in light traffic areas for ships and offshore installations. For hand application or applied using Weber.floor mixing pump.	Old concrete, ceramics, stone, PVC	Cement-based, pumpable underlayment screed as levelling layer for resin coatings. It quickly attains a high surface strength. Layer thickness 2-30 mm, walkable after 6-12 hours and final covering after 1-3 days.	1,7 kg/m^2/mm
Weber.floor 4680 Marine Light	Lightweight levelling of decks in light traffic areas for ships and offshore installations. For hand application.	Steel, galvanised steel, aluminium, concrete, ceramics, stone	Lightweight, polymer modified cement-based fine smoothing compound for use as a levelling material. Walkable after 2-4 hours and final covering after 1-3 days.	0,9 kg/m^2/mm
Weber.prim 801	Pre-treatment of substrates prior to application of Weber Marine Floor Waterproofing Systems	Concrete	Solvent free, alkali-resistant primer. Improves adhesion and stabilization of all dusting and porous mineral substrates prior to application of waterproofing system.	Concrete 0,2 l/m^2
Weber.tec 822	Seamless and jointless waterproofing of wet-duty rooms, where a high amount water tightness is required.	Concrete	Ready-to-use flexible, normal-setting liquid waterproofing membrane for wet-duty rooms. Curing time 10-15 hours.	1,6 kg/m^2
Weber.xerm 847	Highly flexible epoxy waterproofing membrane and tile adhesive for wet-duty rooms, where heavy duty water tightness is required.	Concrete	Flexible, solvent-free, two-component epoxy resin waterproofing membrane and tile adhesive (trowel grade), product is flexible for areas with slight tensions and vibrations. Curing time 24-48 hours.	2,4 kg/m^2
Weber.set 858	Multi use tile adhesive with an exeptional workability suitable for laying in the thin- and medium bed method of floor tiles.	Concrete	Flexible, highly polymer-modified, cement based thin- and medium bed tile adhesive resistant to water, weathering, heat and frost. Walkable after 24 hours.	2,2 kg/m^2
weber.fug 877	Flexible grout mortar for joints between tiles in wet-duty areas where suitable coverings are floor tiles.	_	Flexible, highly polymer modified, cement based grout mortar resistant to water. For joint width 2-20mm. Walkable after 2 hours.	1,0 kg/m^2
Swedac Visco Elastic ACM	Viscoelastic compound for vibrational dampening applied together with cement based screed.	Steel (when shop primer is applied)	Waterbased compound for vibrational dampening of shop primed steel deck used together with cement based screed. Approved for A-60 constructions. Curing time 12-16 hours.	2,02 kg/m^2/mm
Swedac Visco Elastic DG U-1	Viscoelastic compound that forms the filling of a sandwich construction between the deck and a concrete screed or steel sheet and thereby dramatically reduces noise levels generated by vibration of the structure.	Steel, aluminium, wood, stone, ceramics	Two-component polyurethane compound for vibrational dampening of all kinds of steel and aluminium constructions as well as wood, stone and ceramic tiles. Curing time 8-12 hours.	1,4 kg/m^2/mm
Swedac Visco Elastic DG U-1 Green	Viscoelastic compound that forms the filling of a sandwich construction between the deck and a concrete screed or steel sheet and thereby dramatically reduces noise levels generated by vibration of the structure.	Steel, aluminium	Two-component polyurethane compound for vibrational dampening of all kinds of steel and aluminium constructions. Approved for A-60 constructions. Curing time 8-12 hours.	1,3 kg/m^2/mm

Saint-Gobain Byggevarer as
Brobekkveien 84
P.O. Box 216 Alnabru
0614 Oslo
NORWAY
Tlf.: +47 22 88 77 00
Fax: +47 22 64 54 54
www.weber-marine.no

mai 2011