



# MARINE Sikafloor<sup>®</sup> Marine PK-90 Systems

VIBRATION DAMPING VISCO-ELASTIC SOLUTIONS

# Sikafloor® Marine PK-90 Systems

Vibration Damping Visco-Elastic Solutions

**Noise sources like main** engines, thrusters, pumps, generators, HVAC, discoteques and more create not only airborne noise but also a lot of vibrations in the whole structure. If nothing is being done to stop the vibrations, the crew and passengers on board soon will start to feel uncomfortable for various reasons. But when any of Sika's visco-elastic systems are applied, vibrations are dampened to a level not fatiguing to either the structure of the vessel or to the body; health and safety, and the environment on board, are improved accordingly.

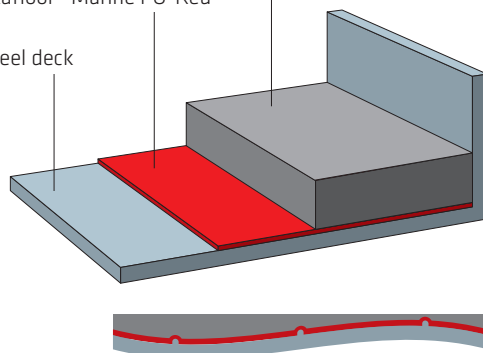
## PRODUCT DESCRIPTION

Sikafloor® Marine PK-90 systems are visco-elastic systems. They are built up with a visco-elastic layer (Sikafloor® Marine PU-Red) with a constrained layer applied on top. The constrained layer can be a cement based compound of Sikafloor® Marine-18 or -118 FC, or it can be steel tiles. Sikafloor® Marine PU-Red is a special two-component polyurethane produced only with one purpose – to dampen the vibrations in the hull of the vessel.

Sikafloor® Marine-18 or Sikafloor® Marine-118 FC

Sikafloor® Marine PU-Red

Steel deck

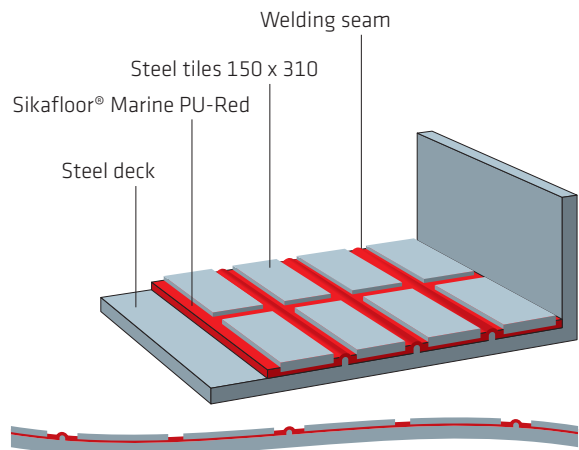


Welding seam

Steel tiles 150 x 310

Sikafloor® Marine PU-Red

Steel deck



## CERTIFICATES

Sikafloor® Marine products have been approved according to the IMO-regulation and other major authorities and classification societies.



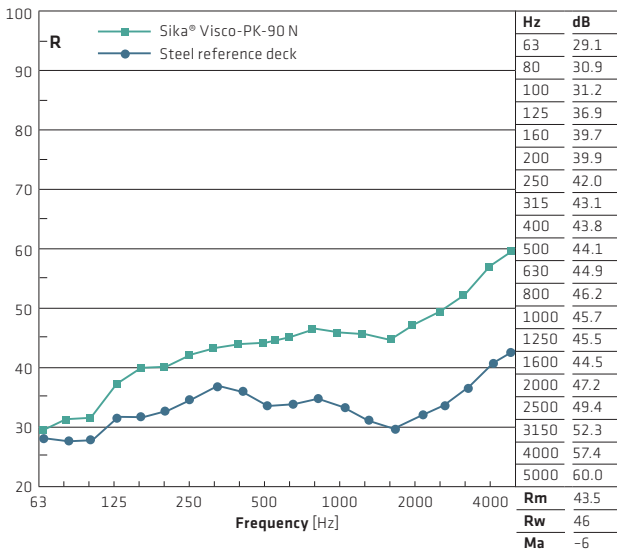
## Sikafloor® Marine PK-90 N

Sikafloor® Marine PK-90 N is a visco-elastic system built up by a layer of Sikafloor® Marine PU-Red and a constrained layer of the one-component pumpable Sikafloor® Marine-18 or -118 FC. From a building height of only 10 mm, Sikafloor® Marine PK-90 N not only dampens vibrations but also levels out the deck and can easily be continued with a thin layer of f.i. Sikafloor® Marine-100 before applying carpet, vinyl, tiles, etc.

### TECHNICAL BENEFITS

- Good vibration damping performance
- Excellent self-levelling and smoothing properties
- One-component cement based top layer

### SOUND PERFORMANCE OF Sikafloor® Marine PK-90 N



Source: Lloyds register ODS

### LOSS FACTOR OF Sikafloor® Marine PK-90 N APPLIED ON STEEL STRUCTURE

System	Loss factor
Steel deck + 1 mm PU-Red + 9 mm SFM-18	0.15
Steel deck + 1 mm PU-Red + 12 mm SFM-18	0.18
Steel deck + 2 mm PU-Red + 12 mm SFM-18	0.20
Steel deck + 2 mm PU-Red + 40 mm SFM-18	0.24

### LOSS FACTOR OF Sikafloor® Marine PK-90 N APPLIED ON ALUMINIUM STRUCTURE

System	Loss factor
Alu deck + 1 mm PU-Red + 8 mm SFM-18	0.23

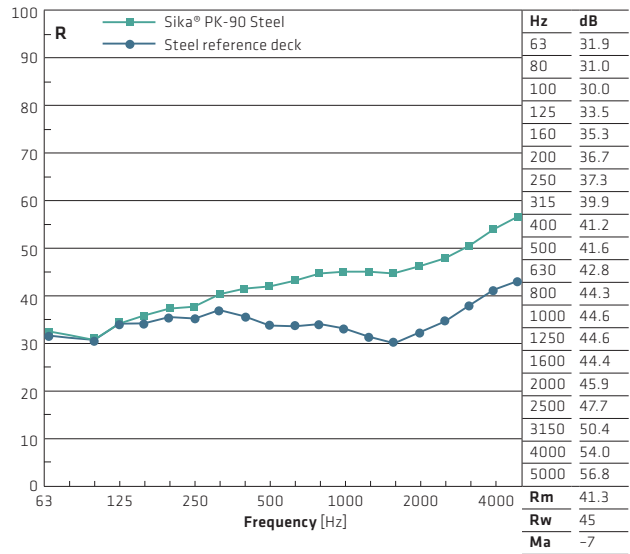
## Sikafloor® Marine PK-90 Steel

Sometimes building height can be limited and there is no space for a 10 mm visco-elastic solution. In these situations, Sika offers a visco-elastic solution called Sikafloor® Marine PK-90 Steel. These 2 visco-elastic systems can be applied in the height of only 3 - 6 mm. This is possible using thin steel tiles on top of the Sikafloor® Marine PU-Red.

### TECHNICAL BENEFITS

- Can be applied from 3 mm thickness
- Good vibration damping performance
- One day application

### SOUND PERFORMANCE OF Sikafloor® Marine PK-90 Steel



Source: Lloyds register ODS

### LOSS FACTOR OF Sikafloor® Marine PK-90 Steel

System	Loss factor
Steel deck + 1 mm PU-Red + 1.5 mm steel tile	0.16
Steel deck + 2 mm PU-Red + 1.5 mm steel tile	0.18

# SIKA WORLDWIDE



## FOR MORE MARINE INFORMATION:



[www.sika.com/marine](http://www.sika.com/marine)

### WHO WE ARE

Sika AG, Switzerland, is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature highquality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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