

PU-D30 Steel System

Visco Elastic Deck Covering System (Vertical)

Product description

PU-D30 is a two component polyurethane compound, designed for use in constrained layer application.

PU-D30 Visco Elastic Damping Layer is a specially formulated polyurethane polymer designed to produce, together with the steel construction and the steel tiles constraining layer, a final structure with very high loss factor over a wide temperature and frequency range. This dramatically reduces noise levels generated by vibration of the structure. PU-D30 Visco Elastic Damping Layer has a high tixotrophy allowing thick layers to be applied on vertical surfaces.

Minimum 1 mm PU-D30 Visco Elastic Damping Layer forms the filling of a sandwich construction between the steel construction and minimum 1,5 mm constraining el. galvanized steel tiles. As the steel construction flexes under vibration transmitted to it from engines or propellers, the visco elastic layer is placed in shear. The special property of a visco elastic material is that it does 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.

The bond between the visco elastic layer and the steel construction, and the bond between the visco elastic layer and the constraining layer is therefore of outmost importance.

Surface preparation

Before application of the PU-D30 ensure that the surface is clean and free from dust, grit, rust, grease or any other dirt. The surface must be ground free from weld spots and other lumps and a normal shop primer must be applied.

Aluminum has to be primed with a wash primer.

If the surface is painted please contact DMS A/S for more information.

Application

Before use, the PU-D30 component A and B must be thoroughly mixed together by using an electric mixer. Component B shall be poured into the component A can and then mixed. Measure up the surface to be treated in smaller sections. Trowel out the damping layer PU-D30 in the specified thickness and lay down the constraining steel tiles in the wet layer.

Note: This system allows the steel tiles constraining layer to be installed without any kind of mechanical fastening.





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Technical description - PU-D30 Visco Elastic Damping Layer	
Density	Approx. 1,6 kg/mm/m ²
Solid content	100%
Solvent	Solvent free
Colour	Brownish
Operating temperature	-20°C to approx. + 80°C
Application temperature	Minimum + 5°C
Pot life	Approx. 30 minutes at 20°C
Curring time	Approx. 8 hours. Maximum acoustical performance after 5 days
Flammability	Not flammable

Packaging

• 9 kg set - PU-D30 Visco Elastic Damping Layer

• 300x300x1,5/2 mm pieces - Steel Tiles (Various sizes and thicknesses)

Shelf-life

PU-D30 Visco Elastic Damping Layer:

Minimum 24 months in unopened packaging. Storrage not below +5°C No limit

Steel Tiles:

Storage

In dry conditions, do not expose to moisture and freezing temperature.

For additional technical information, please contact our technical department.

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