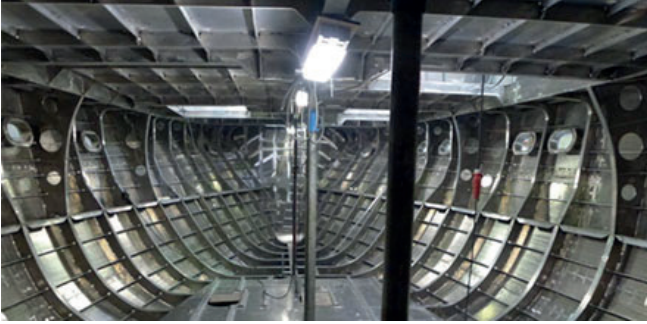


TERMAL (ANTI-CONDENSATION) INSULATION



GENERAL INFORMATION:

Aluminium and steel structures require thermal treatment in order to avoid condensation problems when the vessel is in cold areas.

BASICALLY, WE HAVE TWO (2) OPTIONS (AS SHOWN BELOW):

- 1) Apply a spray-on anti-condensation coating
- 2) Apply a final layer of Stone-wool or similar with reinforced aluminium finishing



SPRAY-ON COATING

In most cases we prefer to use this option (SLP-THERM X9). Using this product means that we can use additional structural insulation materials with an acoustic open finishing instead of aluminium foil.

Especially onboard Yachts > 30 meter the surface area of the ship structure (hull | deck | bulkheads) over the opportunity to create a sufficient amount of absorption in the void (cavity) between the structure and the liner | ceiling. This means that we reduce the air- borne noise levels within the void area and therefor also the noise levels inside the accommodation areas.

In case we use constrained layer sound deadening (SLP-COMP) against the structure we have to make sure that we do not end up with problems! SLP-COMP and SLP-THERM X9 do match perfectly together and we can apply (spray) the coating on top of the constrained layer sound deadening.



Heat losses, thermal bridges and condensation are common problems where temperature differences occur. Noxudol X9 is a water-based thermal insulating compound that can be applied on both metal and plastic. This means that the product can be used within a large variety of areas and within a wide temperature range.

At sea, in buildings and within industry Noxudol X9's low coefficient of thermal conductivity* gives the compound extremely good protection against condensation. The product is consequently used in areas including insulation of boat hulls, treatment of ventilation plants and thermal insulation of machine components. Noxudol X9 is also used to protect installations within industry.

Easy to apply and to paint over Noxudol X9 is based on polymers and fillers. The compound can be applied by means of spray equipment or brush on both metal and plastic. Recommended thickness is 1-3 mm dry film. The insulating compound's excellent adhesiveness means that it affixes securely to the underlayer and can also be coated with most paints.

*The coefficient of thermal conductivity for Noxudol X9 is 0.085 W/mK according to ASTM C 177-97.



REINFORCED ALU. FOIL FINISHING

In case cost is an important element within the project this option is recommended. This means however that we eliminate the absorption and we "increase" the noise level in the void (cavity) due to reflection of the aluminium foil.