

Floating Floor Constructions Class A-60

MED-B-2302 includes two different types of A-60 Deck class Floating Floor constructions.

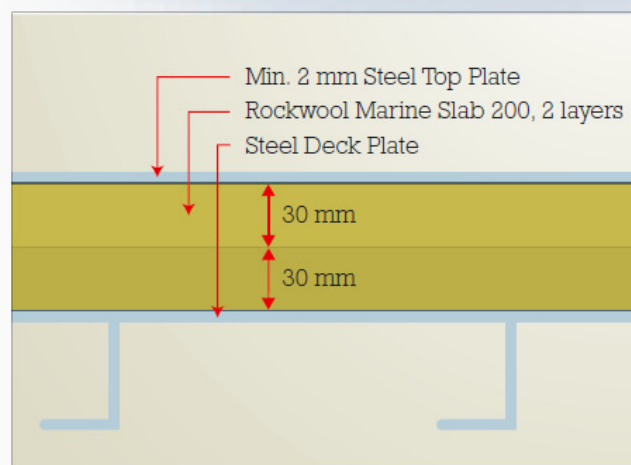
1) Rockwool Marine Slab 200

This solution consists of two layers Rockwool Marine Slab 200, each of 30 mm thickness, covered by minimum 2 mm steel plate, spot welded at c/c 150 mm.

This construction combines the excellent properties of fire protection, noise reduction, high compression strength and thermal insulation.

The max free area recommended is 8 x 8 m. If larger free areas are to be made, division flat bars should be made. This allows the insulation to stay in position without the need of gluing. It is recommended to make full overlap of the two layers. All joints of the Marine Slabs have to be tight butted joints. Smaller weld marks, dents, etc. of an approx max diameter of 50 mm and 10 mm height will be absorbed.

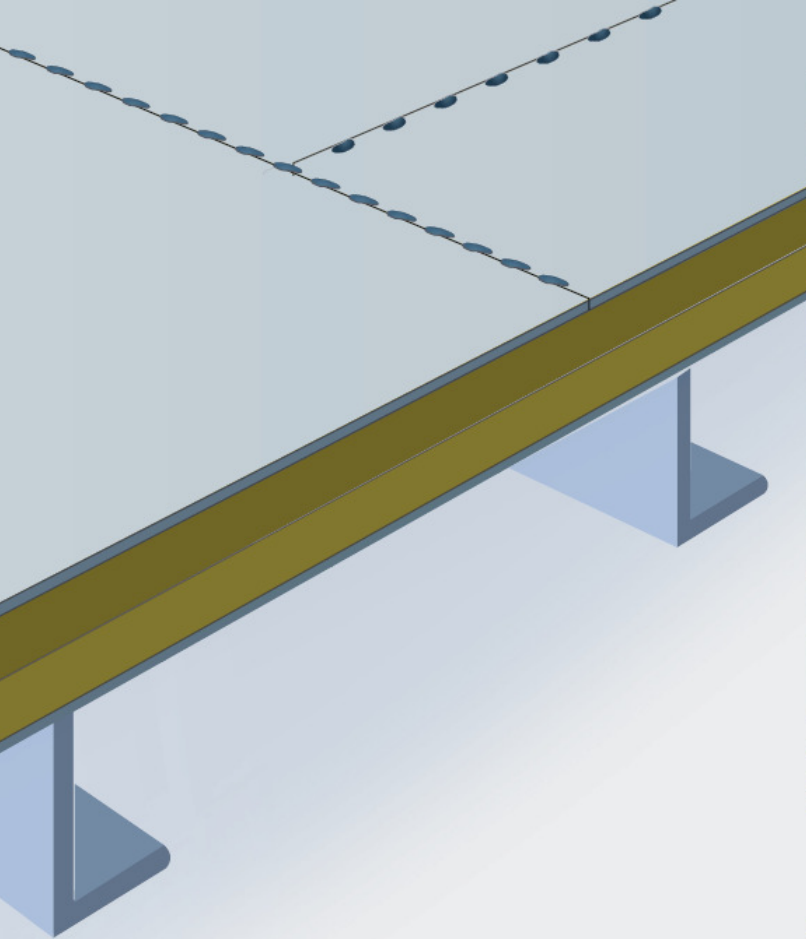
If the deck is undulating, an approved self levelling compound or floor screed will have to be used as first layer; a fire retardant PE compound, cement based filler or similar. If a water based floor screed or levelling compound is used, it must be given sufficient time to cure before the floating construction is installed. It is very important to ensure not to encapsulate water/moisture, as this will enhance corrosion and limit the expected life time of the construction.



The top layer has to be made of minimum one layer of 2 mm steel plate, according to the fire approvals.

Final floor covering has to be decided based upon requirements for mechanical strength and floor finish.

As flooring solution, this one is a "safe" solution, in the sense that a Rockwool Marine Slab of 200 kg/m³ is very ridged and strong, and combined with a medium thick steel plate this is normally adequate for all normal accommodation load.



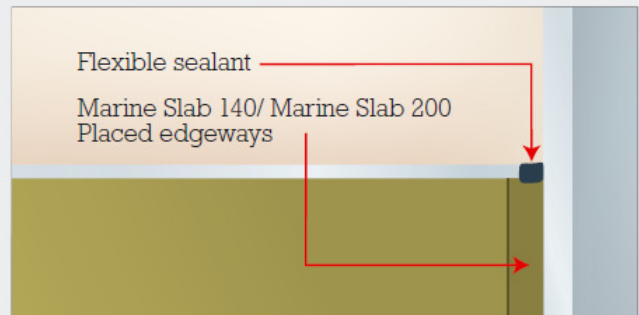
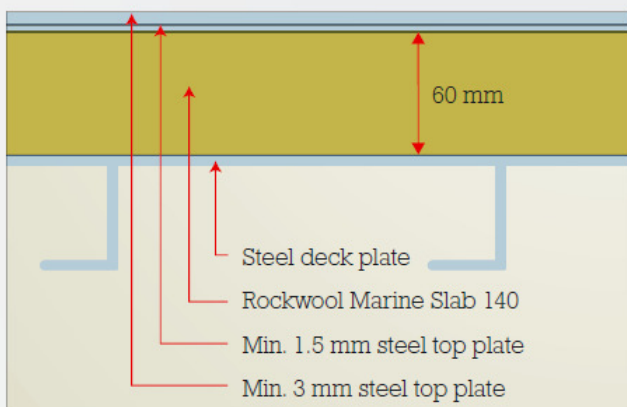
Rockwool Marine & Offshore is preferred supplier for many marine flooring companies. These companies integrate the Rockwool products in their more sophisticated solutions.

Note: Deviations from the certified A-60 floating floor construction in any form, could require new approval by the Class Society or National Marine Authority.

2) Marine Slab 140

This solution consists of one layer of Rockwool Marine Slab 140, 60 mm thickness, covered by minimum 1.5 + 3 mm steel plate. The construction gives in addition to the excellent properties of fire protection, noise reduction and thermal insulation, also reduction of structural noise/vibrations in the steel deck. Rockwool Slab 140 has been designed with focus on the dynamic stiffness, i.e. best possible noise reduction. Please note that the compression strength of this solution is lower than the Marine Slab 200 solution.

The first layer of steel plate must be 1.5 mm thick, installed with 50 mm overlap and secured with pop rivets. The second layer (top layer) must be 3 mm steel plate with butted joints and spot welded at c/c 150 mm. Top covering has to be decided based upon requirements for mechanical strength and finish.



Sealing of edges to prevent structural noise

Enclosing:

For the perimeter of the construction it is recommended to finish the insulation with a rigid Rockwool product i.e. Rockwool Marine Slab 140 or 200 placed edgeways and sealed with a flexible sealant.

Many of the flooring companies are using Rockwool Marine Slabs in densities of 140 - 200 kg/m³, in combination with more complex top layers. The max load for the complete flooring construction will depend entirely on the top layer. The load capacity of the specific construction is to be calculated and tested by the flooring company.

Rockwool Marine & Offshore is preferred supplier for many dedicated marine flooring companies. These companies then create more sophisticated solutions for superb noise reduction in both high and low frequencies.