

Abstract

Floating platform size of 1.50 x 1.50 x 0.50 m (width x length x height) was built as in 1 module and 9 low density polyethylene (LDPE) pontoons size of 0.50 x 0.50 x 0.50 m. were inserted into the floating platform. The LDPE pontoon has buoyancy force about 90 kg which equal to 350 kg/m^2 so one module of the floating platform can carry external load about 696.683 kg. For Using the platform in flooding area 9 modules must be connected to each other for maintain stability of the platform then one will have platform size of 4.50 x 4.50 meters. One module of the platform cost 6,791.62 baht which is very cheap compare to imported platform. One module of the platform could be installed by 3-4 semi-skilled labours within 30 minutes because 12 mm bolts were used as connector at each joint of the steel structure. Each module could be connected to each other on water surface so crane was not necessary which was very suitable for used the platform in flooding area.

Keywords pontoon, floating platform, LDPE, polyethylene, buoyancy force