SAFE INSTALLATION METHOD ON INSULATED METAL PANELS UNDER HIGH LOADS

CHALLENGES

Insulated Metal Roof Panels consist out of a top and bottom metal sheet that are laminated onto an insulating foam core. To be able to install solar modules onto Insulated Metal Roof Panels, common hanger bolt or metal screw methods could cause damages to the Insulated Metal Roof Panels.



Delamination, leaks or metal screw connection failures are possible. In addition, the span of the supporting substructure is quite large, and the compressive and suction loads would need to be mitigated, especially under high wind and snow loads.



SOLUTION

A self-supporting racking system has to be primarily supported by the building structure. Therefore, long self drilling metal screw will be used to connect the load bearing racking to the steel beams holding the Insulated Metal Roof Panels.

The long distance of the steel beam substructure would be spanned by highly rigid rails.

Optional brackets support the design to manage high loads.





AEROCOMPACT®

INTELLIGENT SOLAR RACKING

