

## Case History: X-Shield ProFlex One/ProThane Airbus A380 Hangers Dubai International Airport

---

### The Problem:



A concealed aluminum gutter system was used on these structures to channel away rain water. The joints were simple overlaps riveted together. Minor leakage through the joint was acceptable as rain in Dubai is infrequent and the gutters would drain the water away quickly. The problem was with dealing with the early morning condensation which created an unforeseen volume of water. The gutter design was not able drain away this amount of water quickly resulting in almost daily leakage of water through the joints.



As the gutters were already in place, a joint repair system was required that would provide a waterproof joint that would match the aluminum finish and be in service the next morning in order not to be affected by the condensation.

### The Solution:



The joints were abraded clean to remove any residues and provide a key for primer to bond to. ProPrime M a fast cure epoxy primer was applied followed by the X-Shield ProFlex One reinforced with X-Shield CrackMat to provide increased tensile strength. After 6 hours X-Shield ProThane a UV resistant elastomeric aluminum topcoat was applied to provide a finished that matched the aluminum gutter. The whole system could be applied and cure in less than 12 hours thereby provide a waterproof joint unaffected by condensation.