



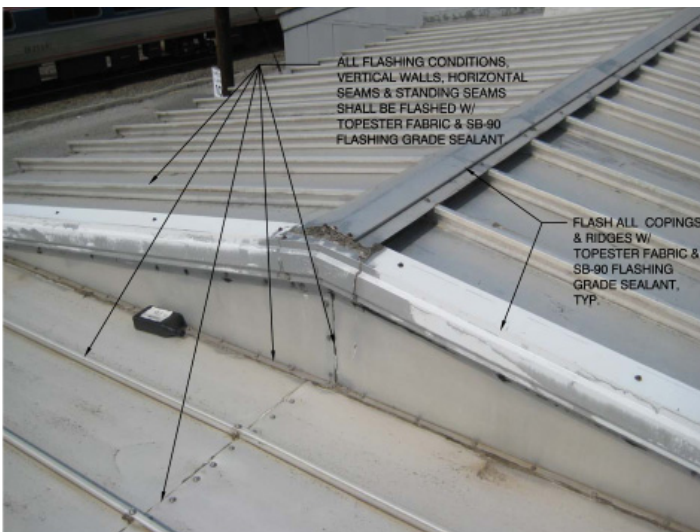
Condition Assessment and Metal Roof Restoration of Amtrak Electrical Substation

Washington, DC

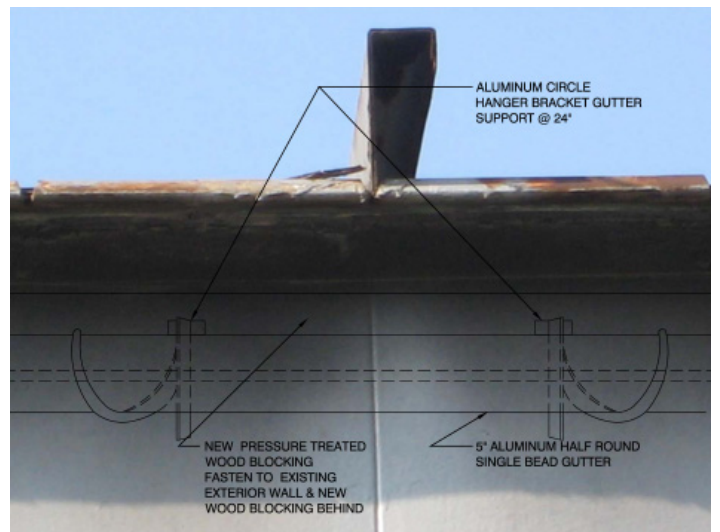
CLIENT:
Amtrak

As a part of an indefinite quantities contract with Amtrak, KSK Architects Planners Historians, Inc. designed the restoration of the original standing seam metal roof of an electrical substation building. The first step was a conditions assessment, which determined that the roof itself was sound, but that lack of maintenance had led to substantial oxidation and minor pin holing. It was also determined that the roof itself was a critical component of an overall proprietary building system. The walls and the roof were made of structural galvanized steel planks. The structural capacity of the roof was integral to what typically would be non-structural roof “pans.” The “seams” provide a waterproof joint between pans but also added “depth” to the structure of the roof, allowing a clear span interior.

KSK explored several different options including roof replacement. The most cost-effective solution was to leave the existing roof in place and to cover it with a solvent-based, fabric-reinforced, fluid applied membrane. The system selected consists of a primer and three top-coats, to develop 75 mils membrane thickness and a 25-year warrantee.



9 PHOTO @ MID & LOW ROOF INTERSECTION
A 1.0 N. T. S.



6 PHOTO @ NEW GUTTER
A 1.0 N. T. S.