

**Project:**

Pacific Country Public Safety Building

**Building Owner:**

Pacific Country, Washington State

**Location:**

South Bend, Washington

**Roof Area:**

15,000 square feet

**Completed:**

Fall 2003

**Manufacturer:**

IB Roof Systems

**System:**

Fully adhered using taper system with 50 Mil white membrane

# PACIFIC COUNTY PUBLIC SAFETY BUILDING



In order to install the insulated taper system, the existing roof system had to be removed down the concrete substrate. The existing roof system consisted of two to four inches of gravel, a layer of torch down membrane, and six inches of insulation board between the torch down and 12” concrete substrate.

With over \$7 million in computer equipment for Pacific County’s central dispatch under one roof, engineers were pressed to find a roof system which could cover the county’s assets as it came time to replace the failing torch applied roof system. When the contractor proposed an IB single-ply membrane with an insulated taper system, it was just what the doctor ordered.

“Two of the primary concerns for the engineers were ponding water and roof maintenance” said Director of Public Works Esco Bell. “Ponding water and leaks on the current torch down system were continual headaches that we needed to be certain to eliminate. That’s why the proposal to cover the entire roof with a leak-proof membrane and taper system that would drain properly was a very good value for us.”

An insulated taper system was proposed due to concerns with the massive amount of water that had ponded on the existing flat roof surface, especially over the central emergency dispatch. With the taper system, nearly 100% of the existing water would be directed to one of several through-wall drains.

“This is one of the most difficult taper systems I’ve ever seen” exclaimed IB field tech Brian Martineau when he first eyeballed the blueprints for the system being installed. “It’s going to be quite an extensive as well as intensive project.”

The existing roof system needed to be removed in sections as inclement weather moving in unexpectedly is always a Fall factor in the Pacific Northwest, and having the entire roof removed would leave no protection in the event of an early October rainstorm. The roofing crew was always ready for an emergency weather change, and made sure the break between the old and new system was kept watertight.

“There were several interruptions in the project due to weather, but the crew handled each instance promptly and professionally. The project was a great success owing in large part to the diligent efforts of the contractor and his team,” added Bell.

The installation included a tapered insulation board followed by a dimensional insulation layer with the IB membrane fully adhered. All layers were attached with adhesive specially designed for IB Roof Systems. Other components used in this installation were in deck self-sealing retro fit drains, through-wall scuppers, engineered termination bar, heavy duty fasteners and plates and custom prefabricated pipe and vent flashings.

The IB roof system had to be designed to meet stringent code requirements, including a 100 mph exposure D rating. This is the highest wind exposure

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# Project Profiles

requirement in the western U. S. according to Factory Mutual's Wind Isotech map. The IB Washington Sales Representative said, "The installation implemented all the components of an IB Roof System with the exception of clad metal. It's a model IB Roof System and the roofing crew is to be commended."

The IB Roof System installed on the Pacific County Public Safety Building in South Bend, Washington will save the taxpayers tens of thousands of dollars in maintenance and repair costs over the years to come.

