

# ROOFING REVIEW

An Overview of Current T. Clear Protected Membrane Roof Systems Applications

## T. Clear Provides “Can Do” Solutions for Condo Problems

**Project:** Margate Towers, Myrtle Beach, SC  
**Agent:** Mike Watts, Styro Systems-Carolinas, Inc.  
**Contractor:** Ben Griffith, Spann Roofing & Sheet Metal  
**Architect:** Earl Swensson Assoc., Inc.

Assembling a roof on what may be the tallest building in South Carolina, right on the beach, can be an expensive proposition. It can also present some unique problems for even the most experienced contractor.

That was the situation facing Ben Griffith of Spann Roofing and Sheet Metal of Conway, South Carolina -- in business since 1958. As he saw it, “The Margate Towers building is 30 stories high with no way to get hot asphalt to the roof before it cools. And the fire marshal in Myrtle Beach does not allow hot asphalt kettles on the roof. Since we started construction in January, there was no way we could use cold-applied with any hope of keeping the insulation dry during construction of the roof.”

That was just the beginning. Griffith continues, “We like to install the membrane first, then mount A/C stands through the membrane. We knew we could not do this with a conventional roof system because all the abuse that occurs during construction would damage



Installing LIGHTGUARD® on Margate Towers in Myrtle Beach, South Carolina.

the insulation, making it harder to find any holes.” As T. Clear agent Mike Watts of Styro Systems-Carolina, Inc. puts it, “If you look at high-end, high-priced condos on the coast, the contractor should be concerned that conventional roof systems with tapered roof insulation over concrete decks will leak, saturate the insulation, and travel on the deck before finding a vent pipe or some other means to enter the building.” His concern is justified. “That makes it extremely difficult to locate the leak, and this can lead to costly repairs and even law suits.”

Then, there is the wind. The roof deck

at Margate Towers is 315 feet in the air in a 130 mph wind zone on open terrain. When hurricane Hugo went through Charleston, South Carolina, a few years ago, it reached wind speeds of 110 to 120 mph. Griffith states, “We can withstand 120 mph winds with a hot tar roof, but there were no warranties available.”

### T. Clear PMR: The Clear Choice For Experts

Having sold the client on a fully-adhered membrane and weighing all of the potential

problems he faced, Griffith chose a T. Clear Protected Membrane Roof System (PMR) with two plies of Derbigum in cold adhesive and LIGHTGUARD® Protected Membrane Roof Insulation panels as his system of choice. Spann Roofing had already installed PMRs in its almost 50 years, and, as Mike Watts notes, "There is another condo down the beach, Sea Castle, with a PMR that has been in place for 20 years with no problems."

T. Clear was also willing to back their PMR system with 20-year and 120 mph Wind Extended Warranties. Mike Watts will tell you, "I don't know any other roof system that can do that."

## T. Clear PMRs Protect The Membrane For Life

LIGHTGUARD PMR insulated panels are comprised of 2-foot by 4-foot sheets of 2-inch or 3-inch high-compressive strength Styrofoam® bonded to a 3/8-inch latex-modified concrete facing. The tight, closed-cell structure of the foam insulation panels resists all forms of water penetration and protects the roofing membrane from heat, ultra-violet rays, temperature swings, freeze-thaw cycles, and other major causes of roof failures such as construction abuse and maintenance traffic. Griffith says, "After we install the A/C units through the membrane, we like to patch the holes and then lay the LG panels to protect the membrane during construction."

The LIGHTGUARD panels are tongue and grooved on the long edges, installed in a staggered arrangement, and serve as both insulation and ballast. Once installed, LIGHTGUARD offers an attractive appearance and a smooth, walkable surface, perfect for ongoing maintenance to the air handling units and other equipment.

Though lightweight at 4.5 pounds per square foot, LIGHTGUARD panels are durable and engineered to withstand winds of over 120 mph. We can guarantee it.



30-story Margate Towers directly on the beach in South Carolina.

T. Clear Corp. offers the first series of single-source, no dollar limit, extended warranties in the industry -- Total Performance Warranties -- to insure water tightness, insulating value and product integrity. In a Total Performance Warranty, T. Clear guarantees that the total roofing system -- including the membrane, ballast and insulation -- will perform for years to come. T. Clear will repair your roof and ask questions later. With over 25 years of experience with PMRs, T. Clear Corp. has seen that any membrane in a properly-installed PMR system will stay as pliable and functional as the day it went down. Even after 20 years.

T. Clear offers a limited 10-year warranty with each system it sells that insures your roof will stay in place in winds up to 90 mph and retain 80% of its R-value of 5 per inch for 15 years. T. Clear Corp. also offers a series of extended Total Performance Warranties for 10, 15 and 20 years and winds up to 100 mph, 110 mph and 120 mph.

## System Goes On Easily

LIGHTGUARD PMR insulated panels are easy to apply. There is no need to adhere the LIGHTGUARD to the roof membrane or use fasteners that can further puncture the membrane. LIGHTGUARD panels can

also be reused in the event of renovation or vertical expansion.

Since completing the Margate Towers building, Spann Roofing and Sheet Metal has used a T. Clear PMR on a re-roofing project also in Myrtle Beach. Griffith says, "This was an occupied building with no place to put the hot asphalt kettle except in the entranceway. With the LIGHTGUARD, we were able to rip up the old membrane, put down the new plies immediately, and then go back and install the insulation panels." Spann also has three other projects under way using T. Clear PMRs, which eliminates the problem of getting hot asphalt to a high roof deck before it cools. These roofs have an abundance of air-handling units requiring continual maintenance which could have posed some big problems.

For technical information or a list of nationwide manufacturer's agents, call T. Clear Corporation at 1-800-544-7398 or visit our web site at [www.tclear.com](http://www.tclear.com).



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