

A Luminous Waterfall of Glass

It was 3M to the rescue again when a different – but equally difficult – aesthetic problem arose across the Mississippi River in St. Paul.

Pat Benincasa, an award-winning public artist, created the “Falling Water Skylight” to fit within the vast ceiling skylight of the Grand Hall of the Minnesota Judicial Center. The “Falling Water Skylight” is gracefully titled, and the effects of light that it produces are equally graceful. Those who climb the staircase of the Great Hall can look up to a view of rippling falls and pools of water passing through multicolored rocks and shadows. As a result, a viewer might easily be deceived as to the truly imposing dimensions of the Skylight – a 7 ton structure, with steel frames holding more than 500 separate pieces of glass, each piece possessing its own unique shape, texture and color.

Benincasa, as a public artist, was well aware that safety must be a foremost consideration. The presence of a catwalk above the Skylight structure raised the possibility of workers dropping tools that might shatter one or more pieces of the glass, exposing those below to falling shards. The answer to this potential hazard was deceptively simple: Encase each piece of the Skylight, prior to final assembly, in a beautifully transparent and highly durable coating.

But what material could fulfill these demanding conditions, and how could it be applied successfully to the bewildering array of glass pieces that made up the Skylight? Benincasa’s inquiries led her to call Ken Smith, senior technical service/development engineer, Construction Markets Division. Smith did more than simply suggest the right product – 3M™ Scotchshield™ High Performance Safety and Security Film. He also took the time to devise an effective application process – a heating table that would allow the moistened film to be squeegeed evenly over the challenging textures of the Skylight glass pieces.

“I worked on that process for half a day or so,” Smith said modestly. But Benincasa expressed both gratitude and wonder. “Ken came out twice to the warehouse where we were working on the assembly. One of those visits was on a Saturday, on his own time. He was sensitive to the three-week time crunch we were under to assemble and install the Skylight. As for the Scotchshield film, it worked perfectly. All of the pieces were laminated with it, and there was no discoloration of the glass pieces whatsoever. The beauty and the safety of the Skylight have both been preserved. You could certainly say that I’m grateful.”



The “Falling Water Skylight,” formed from more than 500 pieces of glass, graces the Grand Hall of the Minnesota Judicial Center. 3M™ Scotchshield™ High Performance Safety and Security Film covers each piece of glass, ensuring the safety of viewers while retaining the beauty of the Skylight.