The MGM City Center Utilises GCP's Waterproofing and Fireproofing Materials

Protecting the largest sustainable development in the world with GCP solutions
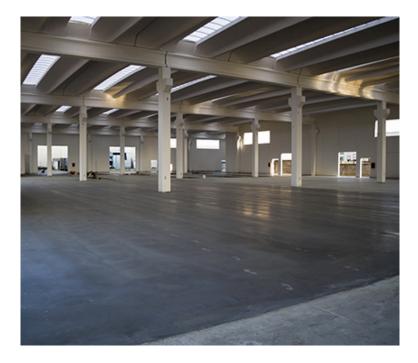

Clients	MGM City Centre, The Cosmopolitan of Las Vegas
Architects	The City Centre projects are a collaboration of more than eight of the world's foremost architectural firms
Fire proofing	Clayton Coatings Inc. d/b/a Clayton National
GCP Solutions	MONOKOTE® fireproofing, PERM-A-BARRIER® air barriers , GRACE ULTRA™ roofing underlayment

Project

Covering 68 acres, the MGM City Center is the largest privately funded building in the history of the United States, and we are proud to be a part of it. Our fireproofing and waterproofing materials were used to protect its approximately 500,000 square feet of commercial buildings. In addition, our fireproofing was used to protect an adjacent commercial building, the LEED Gold-certified Cosmopolitan of Las Vegas, featuring nearly 3,000 rooms, two 50-story towers, three distinct pool environments and an 110,000 square foot casino.

"The job was so big, our decision on fireproofing products was based on which company has the best quality control, performance and field support so we could meet our very fast critical path schedule. Only one company offered us everything we needed to meet his huge challenge—and that was GCP. One reason we've used their products for 30 years."

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Richard Clayton, Founder, President, and CEO, Clayton Coatings Inc. dba Clayton National

No fewer than eight world-class architectural firms were involved with the City Centre's construction, which made it important to select high-performance materials. In addition, they needed an experienced support team which could coordinate the delivery and installation of this material over a vast job site with thousands of workers.

Lastly, the fireproofing material needed to resist intense job-site temperatures, which often necessitated nighttime work. All told, GCP needed to deliver enough product to cover 20 million square feet (1,858,060 m2) of structural support beams and columns, as well as enough waterproofing to cover 200,000 square feet (18,580 m2) of stainless steel roofing and 100,000 feet (30480 m) of wall surface. These products had to provide excellent performance while withstanding extreme desert temperatures.

Clayton National, the largest fireproofing contractor in North America and a UL Qualified Spray-Applied Fire-Resistive Materials (SFRM) Contractor, was selected to deliver our fireproofing products. They shipped and spray-applied over 500,000 bags of material, comprising three different products:

- MONOKOTE®MK-6®was used wherever structural steel would be concealed.
- MONOKOTE®Z-146®high-density cementitious fireproofing material was used in high-traffic areas.
- MONOKOTE®Z-106®medium-density fireproofing was used in the parking garages, mechanical rooms and electrical rooms.

Six-full-time quality control personnel monitored the thickness, density, and coverage of these products. In the end, the combination of high-quality materials and high-intensity organization allowed all parties to meet stringent quality control requirements and challenging project deadlines. Lastly, two other GCP products were used in the construction of the MGM complex.

CityCenter architects specified GRACE ULTRA™ roofing underlayment for areas to be covered by stainless-steel roofs. In the heat of a Nevada summer, the exceptional heat resistance of GRACE ULTRA™'s butyl-based adhesive chemistry and its proven superior performance made it an ideal choice for this "hot roof" assembly.

In the same vein, PERM-A-BARRIER®HT (high temperature) wall membrane was on wall surfaces. Designed for the kind of elevated temperatures found in the desert heat, PERM-A-BARRIER®HT was a perfect choice as a self-sealing, self-adhering vapour barrier.

When it came to ensuring a quality fireproofing and waterproofing job in this high-stakes city, nothing was left to chance.

The Result

MONOKOTE®fireproofing, GRACE ULTRA™ roofing underlayment, and PERM-A-BARRIER®air barrier membrane are all exemplary products that add design and performance advantages, while making life easier for contractors in the field. The use of MONOKOTE®allowed contractors to complete a massive project on time while working under some of the harshest jobsite conditions imaginable. In turn, the designers who specified MONOKOTE®in their plans ended up choosing a material that performed admirably and passed inspection.

Blue360℠ Product Performance Advantage.

Because every project, large or small, deserves the best level of protection.