As one of the tallest buildings in all of Mexico, Torre Mayor Tower combines impressive architectural design with state-of-the-art technology and construction materials. This fifty-five story superstructure offers its tenants unparalleled design efficiencies; allowing them to utilize office space in the most resourceful way possible.

Such a high-profile project demands the most stringent requirements for fire protection of its structural steel framework. Isolatek International was able to satisfy every demand and provide Passive Fire Protection products for each area of the project. The Toronto, Canada based architectural firm of Adamson Associates Architects turned to Isolatek International to help design various passive fire protection systems throughout the entire structure.

CAFCO® BLAZE-SHIELD® II / ISOLATEK Type II, CAFCO® BLAZE-SHIELD® HP / ISOLATEK Type HP, CAFCO® FENDOLITE® TG / ISOLATEK Type TG and CAFCO® SprayFilm® / ISOLATEK Type WB were selected to satisfy all the passive fire protection requirements for the Torre Mayor project.

The entrance of the Torre Mayor structure is a large atrium comprised of exposed lightweight steel pipe columns supporting decorative steel spandrel beams. In designing fire protection for structural steel in this area, Adamson Associates Architects selected CAFCO SprayFilm / ISOLATEK Type WB thin-film intumescent coatings.

CAFCO SprayFilm / ISOLATEK Type WB affords architects the ability to design structural steel that can be exposed to view and color coated, if desired, to match its surroundings, while still providing the required fire resistance rating.

CAFCO SprayFilm is / ISOLATEK Type WB the most cost-effective intumescent fire protection product available. This intumescent product can be applied using fewer passes than other competitive products and offers exceptional coverage. CAFCO SprayFilm / ISOLATEK Type WB offers the widest range of UL intumescent designs and meets all UL environmental requirements without the need for costly topcoats, adhesive base-coats, or mesh reinforcement. The superior physical property characteristics of CAFCO SprayFilm / ISOLATEK Type WB satisfied all project specification requirements and allowed the architect the necessary design flexibility for this project.

The CAFCO / ISOLTEK Dry-Mix line of Spray-Applied Fire Resistive Materials (SFRMs) provided
the required fire resistance ratings in all other general service areas, parking structures and stairwell systems throughout the building.

Adamson Associates chose CAFCO® BLAZE-SHIELD® II / ISOLATEK® Type II to protect the structural steel beams, columns and decking. A commercial density fireproofing product having the “UL Investigated for Exterior Use”, CAFCO BLAZE-SHIELD II / ISOLATEK Type II was able to withstand exterior conditions through the building construction cycle, a benefit not found with any other commercial density SFRM. This is why CAFCO BLAZE-SHIELD II / ISOLATEK Type II was the SFRM of choice for the protection of perimeter columns and beams.

Adamson Associates Architects demanded an SFRM that would withstand limited physical abuse and abrasion resistance in the parking garage areas and stairwell systems. For this application, CAFCO BLAZE-SHIELD HP / ISOLATEK Type HP was chosen. This medium density, portland cement based Dry-Mix SFRM is able to provide the required fire resistance ratings and supply the added degree of durability. Like CAFCO BLAZE-SHIELD II, CAFCO BLAZE-SHIELD HP / ISOLATEK Type HP has been “UL Investigated for Exterior Use” and can withstand exterior weather conditions throughout the construction phase. The CAFCO BLAZE-SHIELD / ISOLATEK Type product’s unique pneumatic application allows the material to be conveyed under low pressure to the substrate, a major factor to consider when pumping Wet-Mix SFRMs in high-rise construction. Additionally, CAFCO BLAZE-SHIELD / ISOLATEK Type SFRMs allow for greater mobility during application since the use of scaffolds is often eliminated.

Exposed wind bracing is located throughout this massive fifty five story structure. In many areas, the wind bracing is exposed to public view and has encountered high volume maintenance traffic. CAFCO® FENDOLITE® TG / ISOLATEK Type TG was selected as the product to provide both the required fire resistance rating and high degree of durability. CAFCO FENDOLITE TG / ISOLATEK Type TG is a high density, Wet-Mix SFRM specifically designed for trowel application in exposed areas. In order to achieve the desired finish and appearance for the exposed wind bracing, the applicator installed metal lath in a boxed configuration with a plastic nosed corner bead. The CAFCO FENDOLITE TG / ISOLATEK Type TG was then trowel-applied to the final thickness required and a water-based latex paint was applied as a decorative topcoat over the SFRM to match interior surroundings. With the most comprehensive line of passive fire protection products on the market today, Isolatex International remains in the forefront. The Torre Mayor Tower furthers Isolatex International’s reputation as the leader in providing worldwide Total Passive Fire Protection.