

## GROOVED PIPES CONNECTION SYSTEM

### PROJECT BRIEF: Atomium, Brussels, Belgium



#### ■ Brussels, Belgium

The Atomium was designed by engineer André Waterkeyn to mark the 1958 World's Fair in Brussels. The Atomium is a cross between sculpture and architecture, symbolizing a scale model of a metal crystal molecule, magnified 165 billion times. The structure is built entirely of steel, coated with aluminum and rests on three massive support pillars. The nine large spheres of the Atomium are connected by tubes. Escalators installed in the tubes are among the longest in Europe. The bulbs include a scientific exhibition and a restaurant.

This renovation project was due to its construction a major challenge. The grooved tubes were bend to a particular radius. Assembly was done with Quikcoup® style 007 and style 75 flexible couplings. The whole sprinkler system was finally coated in RAL 7038 which lead to a fantastic result for which both the installers and suppliers received great honor.

During the project the engineers faced an additional challenge due to heavy winds which swing the bulbs of the Atomium by five feet from its axes. To cope with these movements, special FM approved flexible spacers in sizes from 2" to 4" in conjunction with Quikcoup® Quikflange and flexible couplings were installed.

#### SPECIFICATIONS

- SERVICES: Fire Protection - Wet System
- PIPE MATERIALS: Grooved Carbon Steel RAL 7038
- PIPE SIZE RANGE: 1" - 6" (33 - 60 mm)



#### ■ MARKET:

Fire Protection

#### ■ QUIKCOUP® SOLUTIONS:

Installation time savings  
Flexibility in layout  
Solution for wind movement

#### ■ OWNERS:

City of Brussels  
Federal Government of Belgium

#### ■ ENGINEER / INSTALLER:

SOCOBEMA SA  
Sprimont, Belgium

#### ■ QUIKCOUP® DISTRIBUTOR:

Zuid Nederlandse Buizen BV  
Maastricht, The Netherlands

#### ■ DATE OF COMPLETION:

September 2005