

# Discover **DOW**

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## Leaving a Lasting Impression in London



*Jewelry boxes and crown jewels are luxuries typically found at a royal castle rather than a sporting venue, but these are the words used to describe two premier arenas at the London 2012 Olympic Games. The exteriors of the London 2012 Olympic Stadium and Copper Box both showcase spectacular designs, and inside, they feature high-performance insulation solutions from Dow.*

### **The London 2012 Olympic Stadium**

Dubbed the “Crown Jewel” of the London 2012 Olympic Games, the Olympic Stadium features solutions from Dow both inside and out. On the outside, Dow coatings technologies are used in the Stadium Wrap—an innovative fabric wrap that encircles the entire stadium. Inside, **STYROFOAM™** insulation solutions from Dow are being used to provide structural support, protect waterproof coverings and offer moisture resistance during the lifespan of the Olympic Stadium.

These solutions help increase long-term energy efficiency—contributing to London’s goal to hold the most sustainable Olympic and Paralympic Games in history. Insulation

solutions from Dow will help parts of the venue withstand the elements long after the London 2012 Closing Ceremony.

### **The Copper Box**

*From the outside, it looks like a jewelry box with smooth recycled copper sides and a completely flat roof, and inside, the Copper Box is home to Olympic events including handball, goalball and the modern pentathlon. Due to the structure’s copper exterior and rectangular shape, the arena had to be designed in a unique way.*

To make the building truly reflect a sleek jewelry box, designers had to find a way to install the heating and cooling units on the roof, while keeping the machines out of view from spectators and athletes when

seen from ground level. Designers decided to install the equipment around the perimeter edge and conceal them with the use of high parapets. They chose **STYROFOAM™** insulation solutions from Dow to improve energy efficiency and to add extra strength to support the heavy heating and cooling units in concentrated areas. The result was a sleek, beautiful facility with no obstructions to the view.

Since the equipment is placed around the perimeter, the noise and vibration is reduced over the central playing area of the venue. Not only are Dow solutions contributing to some of the most spectacular Olympic Venues in London, they’re also helping improve fans’ experiences at the Games!

## **Fun Facts**

*about the Venues*

### **Olympic Stadium**

- 🔥 The ring at the top of the stadium is made out of surplus gas pipes—aligning to the sustainable construction efforts of the Games.
- 🔥 About 10,000 metric tons of steel were used during construction which is much less than past Olympic stadiums making the construction efforts more sustainable.

### **Copper Box**

- 🔥 The roof collects rain water which will be used for flushing toilets—reducing the Copper Box’s water use by up to 40%.
- 🔥 The outside of the venue is clad in 3,000 square meters of mostly recycled copper.