

# British School of Chicago gymnasium – Chicago, IL, USA

## Project overview

MAPEI's *Ultraplan® Extreme* self-leveling underlayment was used to provide a level, smooth surface for the installation of wood sports flooring in the gymnasium at the new British School of Chicago in the South Loop area.



## Project information

<b>Project category:</b>	Institutional – School
<b>Period of construction:</b>	2014-2015
<b>Year of MAPEI involvement:</b>	2015
<b>MAPEI coordinator:</b>	Richard York
<b>Project owner:</b>	Nord Anglia Education
<b>MAPEI distributor:</b>	Carpet Cushions & Supplies
<b>General contractor:</b>	W.E. O'Neil Construction
<b>Surface-prep company:</b>	PSI, Inc.
<b>Architect:</b>	Antunovich Associates
<b>Project manager:</b>	Bob McDonald
<b>Photographer:</b>	Richard York
<b>Project size:</b>	9,000 sq. ft. (836 m <sup>2</sup> )



## MAPEI products used

- *Ultraplan Extreme*
- *Primer T™*



# British School of Chicago gymnasium – Chicago, IL, USA

## *Ultraplan Extreme* provides perfect surface-prep solution

The British School of Chicago opened its first location in Lincoln Park in 2001 with 14 students. The current enrollment has now topped 850 students, and this popular school has outgrown its original location. A new expansion into a purpose-built facility in the South Loop of Chicago is scheduled to be completed in September 2015; it will include a green rooftop park and a full-size soccer field, as well as a gymnasium to balance the physical and mental aspects of the school's curriculum.

### MAPEI products on the jobsite

Maple hardwood flooring, 2-1/4" (5,7 cm) wide x 25/32" (2,0 cm) thick from Connor Sports Flooring, was selected for installation in the ground-floor gymnasium at the school; but first, the floor had to be brought within a tolerance of 1/8" in 10 ft. (3 mm in 3,05 m). This challenge would normally be handled by installing

a conventional cement-based underlayment, but that was not possible on this project because an integrated moisture barrier was already attached to the underside of the hardwood sports flooring.

Because the moisture protection was located directly below the hardwood flooring, anything installed beneath this barrier would be subject to wet conditions. Applying a second barrier system simply to protect the underlayment would not only be redundant, but also very expensive.

The answer to this problem was found in MAPEI's new exterior-grade underlayment called ***Ultraplan Extreme*** – a high-compressive-strength, cement-based self-leveling compound that achieves close to 3,000 psi (20,7 MPa) in three hours and 7,500 psi (51,7 MPa) in 28 days. With a working time of 30 to 45 minutes and a final set of 60 to 75 minutes, this product met every

requirement of a conventional self-leveler. *Ultraplan Extreme* also provided extra benefits: It is designed for use on interior surfaces where environmental controls are not in place; plus, it is not affected by exposure to water or freezing temperatures once it has cured. In addition, moisture testing is not required over properly prepared concrete surfaces.

These impressive working characteristics allowed *Ultraplan Extreme* to be used to level the concrete floor to within tolerance. Next, a plywood sleeper system that produces a floating underlayment was installed over the top of *Ultraplan Extreme*. The area was staged for the hardwood flooring the next day, and the installation began within 24 hours. The finished hardwood flooring was nailed into the floating plywood underlayment. As a result, time was saved and the entire floor was completed within a week.

