



WORLD WIDE WEAVE

Sustainable higher education architecture

LEED certification for Science Complex at Eastern Michigan University

As one of the most respected universities in the state of Michigan, Eastern Michigan University near Detroit combines higher education with sustainable architecture. The Mark Jefferson Science Complex has now been awarded the much coveted LEED Gold Certification (Leadership in Energy and Environmental Design). For the building's solar management system, the architects from Lord Aeck & Sargent relied on the Omega 1510 stainless steel mesh from the internationally leading technical weaving operation, GKD – GEBR. KUFFERATH AG.

The outer shell of the three-tier building was designed using a new kind of solar protection solution made of stainless steel mesh. Building-high metallic mesh panels protect the object from direct sunlight and thereby help secure an optimised ecological balance. A total of 89 rectangular metallic mesh elements made of Omega 1510 stainless steel lend the facade its exceptional functionality and aesthetics. The individual panels range from two to three metres in length and were given a matte finish to further reduce the impact of the powerful sunlight. However, they still allow enough daylight into the building for those inside to work and study. The mesh therefore enables significant savings to be made in terms of lighting and room air conditioning, which in turn reduce the building's environmental impact. At the same time, the metallic mesh shell grants unrestricted views of the outside surroundings. Around 900 square metres of Omega mesh protect the building from the extreme weather for which Michigan is famous, including ice, rain, wind, heat and cold. Thanks to its robust and sturdy construction,



WORLD WIDE WEAVE

the facade requires virtually no subsequent maintenance or replacement costs. At the end of its useful life, the mesh is 100% recyclable. GKD also worked with the architects from Lord Aeck & Sargent to develop a special mounting system for the metallic mesh elements that is tailored specifically to the building. Cantilevers, arranged at the top and bottom, serve as the main anchoring points, while smaller slide-in supports on each floor provide additional stability.

The positive energy balance and sustainable efficiency of the stainless steel mesh made an important contribution towards the building receiving LEED Gold certification.

GKD – WORLD WIDE WEAVE

As a privately owned technical weaver, GKD - Gebr. Kufferath AG is the world market leader in metal, synthetic and spiral mesh solutions. Four independent business divisions bundle their expertise under one roof: Industrial Mesh (woven metal mesh and filter solutions), Process Belts (belts made of mesh and spirals), Architectural meshes (façades, safety and interior design made of metal fabrics) and Mediamesh® (Transparent media façades). With its headquarter in Germany and five other facilities in the US, South Africa, China, India and Chile – as well as its branches in France, Spain, Dubai and worldwide representatives, GKD is close to markets anywhere in the world.

For more information:
GKD – GEBR. KUFFERATH AG
Metallweberstraße 46
D-52353 Düren
Tel.: +49 (0) 2421 / 803-0
Fax: +49 (0) 2421 / 803-211
E-Mail: metalfabrics@gkd.de
www.gkd.de

Please send a reprint to:
impetus.PR
Ursula Herrling-Tusch
Charlottenburger Allee 27-29
D-52068 Aachen
Tel.: +49 (0) 241 / 189 25-10
Fax: +49 (0) 241 / 189 25-29
E-Mail: herrling-tusch@impetus-pr.de