

## World of Polyurea

### Hercules introduces the self-extinguishing HERTEC 1140 FR

Hercules is now offering a new, 2-component, aromatic polyurea spray elastomer that is 100% pure, plasticizer- and solvent-free, flame-retardant, self-extinguishing gives low smoke emissions and doesn't drip. The elastomer is traditionally processed using a high-pressure, multi com-

ponent spray system. HerteC 1140 FR polyurea spray elastomer is used as a waterproof, crack-bridging system, in applications where fire proof characteristics are needed. It can be used, with or without a geotextile membrane, to protect concrete, cement screed and steel, i.e. it can ba-

sically be used for all surfaces, above and below ground, such as parking garages, water tanks, steel pipes, tanks, oil separators, bulk silos, docks, truck bodies, etc. It is also used to seal flat roofs, as a wood coating and on various industrial floor surfaces. HerteC 1140 FR is an ex-

tremely durable and safe solution that protects structures from a wide range of chemicals and pollutants. A short video clip demonstrating its fire-safety properties can be found at [www.polyurea-world.com](http://www.polyurea-world.com).

### "POLYDECK" roofing system

The lightness of being, or at least the lightness of his roofs, was architect Werner Thurner's vision (Villach, Austria) when he developed the Polydeck system; a vision that has led to Polydeck's use in two, trendsetting projects.

Thurner had to develop a completely new process in order to create the so called 'flying' roofs. The first two projects comprised the roofing of an underground garage access and the entrance to a local SPAR supermarket.

In order to create a design specific to the requirements of each project, Thurner pre-sprayed a specially glued, smooth wood panel. A spe-

cial primer for pale damp substrates, HerteC Pox 010 (Hercules, Villach, Austria) was applied first. Key requirement was a residual moisture content below 10 percent. HerteC 1120 was then applied in layers of approx. 2 mm using a Gama G 50 Evolution and the Pentech MG spray gun. This system was chosen to ensure the surface was suitable for walking on whilst being strong enough to support snow ploughs.

Finally, the Polydeck panels were delivered to site, and positioned by crane in the prefabricated steel construction. Connections and bindings, together with the

holes needed for transportation were filled in situ using HerteC 75 SL and HerteC 425 polyaspartic. The surface was then gently coated with HerteC KF 500 colorfast topcoat to give the entire project a colored „shine“.

Spraying was carried out by ACT (Advanced Coating Technology).

“The possibilities of what can be achieved with polyurea are numerous. The architecture has such a wide scope that by using spray technology, areas can be coated that would be impossible with standard systems,” delighted architect Werner Thurner. “Apart from the optical design possibilities, polyurea

offers many more advantages. Coatings on multiple glued wood panels makes such a lightweight construction that it is suitable for a wide variety of applications. The first 2 projects were completed successfully, with just a few, small teething problems, enabling us to continue designing and developing this capability even further!”

#### Why use polyurea and not PVC- or bitumen roofing?

Seamless, layers that stick firmly together, no additional weighting with gravel, etc. required, no welding joints, no binding / bonding problems and 100% UV-stable.

