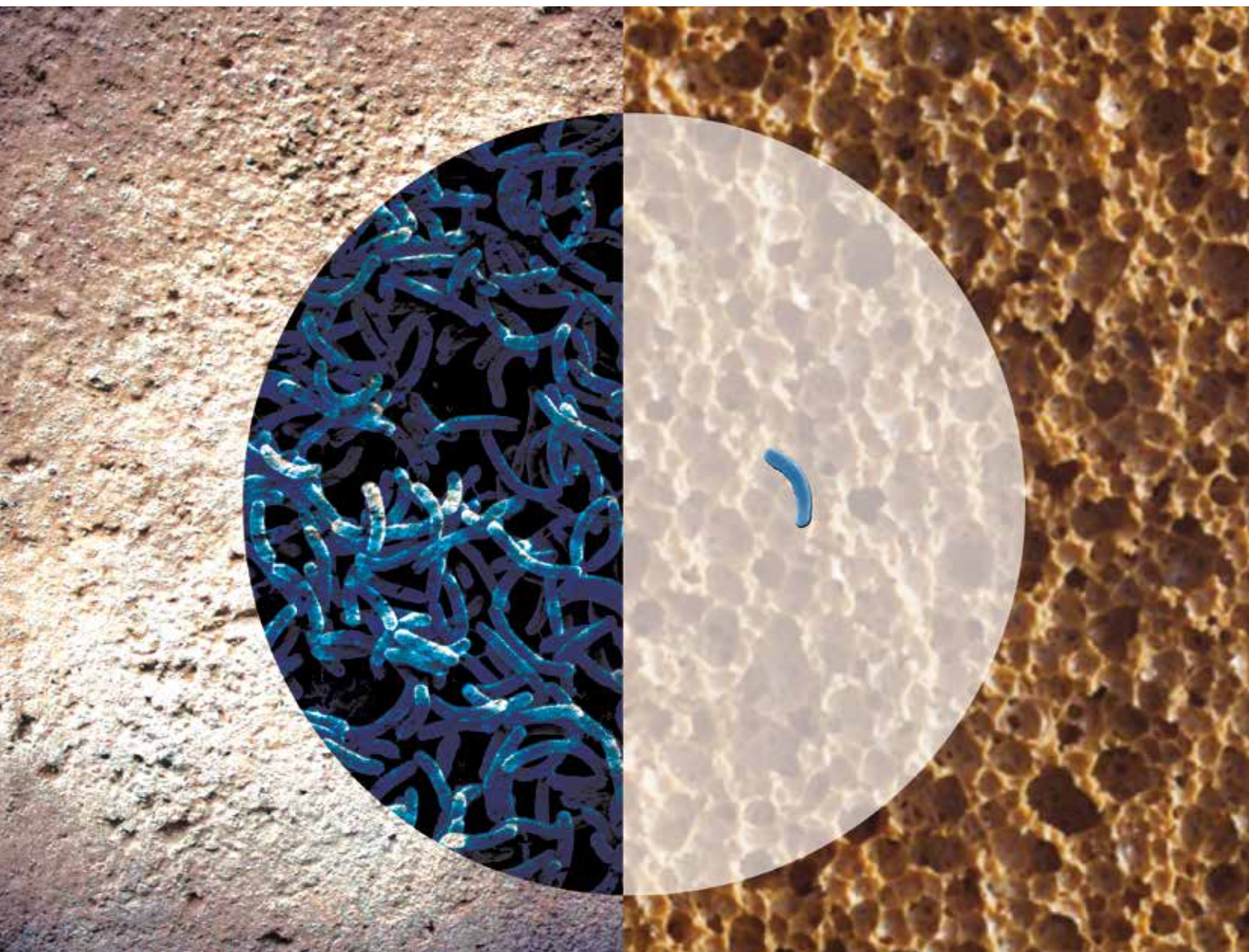


Defender Antibacterial Protection

The New Standard for Hygiene



Modular flexibility and rapid deployment



Defender Antibacterial Protection

Defender

Defender is a system of lightweight building panels which can be quickly deployed in the form of prefabricated units or as external cladding for an existing structure. Their modular nature allows them to be easily dismantled, stored and re-used multiple times. The panels offer fire protection as well as thermal and acoustic insulation allowing them to be used for accommodation purposes in addition to providing offices, control rooms and strategic warehousing. The sheet molding compound (SMC) outer layers can be provided with a variety of textures to help them blend into their surroundings or to create a more natural and pleasing appearance, especially useful when providing units for accommodation. They also allow the panels to be used or stored in the harshest of field conditions and the most inclement of weather.

The Defender system provides a high level of flexibility with the ability to incorporate additional layers. This allows the panels to offer a range of specialized capabilities:

- Blast Protection;
- Ballistic Protection;
- Antibacterial Protection;
- Fire Suppression;
- HPM Electromagnetic Shielding;
- Embedded or Conformal Antennas;
- Radar Absorption;
- RFID and Sensor Systems;
- Acoustic Sensors and Transmitters.

Antibacterial Protection

Whether it's in clinics, schools, industrial buildings or leisure facilities, hygiene is a much discussed topic and is now more relevant than ever. With the Defender Antibacterial Protection panel, Pelta Protection Systems has developed a solution that can provide active protection precisely where it is most needed, which requires no maintenance and is guaranteed for five years. The panel's high level of effectiveness has been proven in both laboratory and practical tests.

The Defender Antibacterial Protection panel has a special surface that immediately counteracts microbial proliferation. This surface contains an additive that is inserted during production whose active components are able to prevent the growth of bacteria, mold and fungi.

The agents used destroy the cell membrane of the pathogens, blocking respiration and cell nutrition and consequently disrupting cell division. Independent tests, performed according to the ISO 22196 standard, have shown that proliferation of bacteria on the panel surface is reduced by 99.96% for *S.aureus* and 99.99% for *E.coli*. These results are considered excellent in the healthcare area.

The surface of the Defender panel retains its effectiveness even when cleaned regularly.

Applications

The Defender panel's highly effective antimicrobial properties make it ideal for coating surfaces in the field of healthcare, for example in hospitals, medical clinics and pharmacies, in the food industry in preparation, packaging and storage rooms, as well as in education establishments and public facilities. The panels are especially useful where sanitary protection goes hand in hand with rapid implementation, convenience and a respect for the environment.

Pelta Protection Systems

Pelta Protections Systems is a joint venture between Ingegneria Dei Sistemi S.p.A. (IDS), which has over 30 years' experience of producing electromagnetic engineering solutions and services for both civil and defense applications, and Acell Industries Ltd. which has produced fire resistant foams and composite panels for building applications for over 25 years.

Pelta Protection Systems Ltd.