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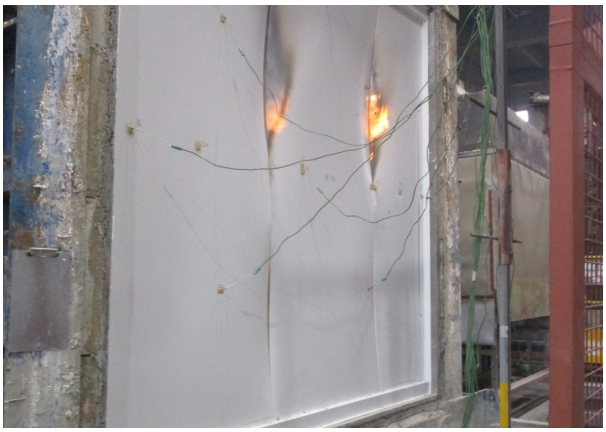
CE Marking of Sandwich Panels

We offer a complete service of testing and certification to access the European market.



Sandwich panels are construction products made of externally-profiled steel sheets. They provide mechanical strength to a core of insulating material, such as polyurethane PUR, wool or PIR. It is a product widely used for industrial buildings, sports centres, or large facilities, to facilitate the performance of thermal and acoustic insulation.

International regulations (EU)

To access the European market, sandwich panels must meet the requirements of the quality and safety parameters defined in the **Construction Products Regulation 305/2011 (CPR)** scheme in regards to:

- Mechanical resistance and stability
- Fire safety
- Health
- Hygiene
- Environment
- Safety in use
- Protection against noise
- Energy saving
- Thermal insulation

CE Marking

Standard **EN 14509** (Self-supporting double skin metal faced insulating panels – Factory made products – Specification) regulates the CE marking of sandwich panels. A Notified

Body must perform the required testing under this regulation in order for the product to acquire the certification.

CE marking through ETAG (EOTA)

Manufacturers of sandwich panels can also obtain their CE marking by way of the **European Technical Approval Guideline (ETAG) 018**. The European Technical Approval (ETA) is a document that comprises a technical assessment of the various characteristics of a product's performance not covered, either partially or fully, by a harmonised technical specification.

Our methodology

Our team of engineers studies each project to determine the optimal testing plan:

- Study of families of products to test according to their type and the desired market access conditions
- Assessment of the number of test samples and design of the optimal testing plan.
- Carrying out tests and issuing the corresponding reports.
- Issuance of an EXAP report where required for the extended application of fire resistance test results.

Applus+ is a **Notified Body (NB 0370)** for the CE marking of sandwich panels and we have a vast experience in providing this type of service in partnership with EOTA member organisations. We provide technological support to manufacturers of the construction industry in accordance with the **Construction Products Regulation (CPR)**.

We carry out all relevant tests in our laboratories, according to the specifications of standard **EN 14509**:

- **Mechanical tests**: grouped in families of flat and profiled panels. We test parameters of purity and type of core.
- **Durability tests**: Applied to panels for external applications. This tests focus on the accelerated aging effect of temperature and humidity, which depends on each core material.
- **Thermal transmittance**: These tests measure the thermal transmittance value of the panel (U), incorporating the declared thermal conductivity for the core material, the joints and any profiles facing.
- **Reaction to fire**: Determined by the minimum and maximum thickness of each geometry and type of panel in order to cover the whole range. According to the appropriate Euroclass, we test under **EN ISO 1182, EN ISO 1716, EN 13823 or EN ISO 11925.**

- **Other related tests**: external fire performance for roofs, fire resistance, water permeability, air permeability, airborne sound insulation, sound absorption, etc.

About Applus+ Laboratories

Applus+ is a global leader in testing, inspection and certification and has over 23,000 employees operating in up to 70 countries. The Applus+ Laboratories division is a benchmark in Europe in the field of testing and certification of fire safety. We have our own versatile network of laboratories and unique facilities for full-scale fire testing both in tunnels and in the open. We offer a complete service to manufacturers of fire protection products:

- Fire testing in a laboratory
- Certification and access to international markets
- Full-scale fire simulation and testing in tunnels
- Full-scale open-field fire testing